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COMMENTS ON DRAFT PROPOSAL

(BEE/Transport/Passenger-Cars/2025/3707-29)

Revised draft CAFE 3 norms for next cycle

(2027-28 to 2032-32), published on 25.09.2025

October 13, 2025

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Comments on the revised draft CAFE 3 norms for M1 vehicles

The Bureau of Energy Efficiency (BEE) first notified the corporate average fuel efficiency (CAFE) norms for M1 category vehicles in 2017. These were introduced in two phases, CAFE-I from 2017-18 to 2021-22 which set a target of average CO₂ emissions to be less than 130 gCO₂/km and CAFE-II from 2022-23 to 2026-27 which set a target of average CO₂ emissions to be less than 113 gCO₂/km.¹

The first draft future fuel efficiency norms, CAFE-III and CAFE-IV for M1 category vehicles were notified in June 2024. CAFE-III was to be effective from 2027-28 to 2031-32, setting a target of average CO₂ emissions to be less than 91.7 gCO₂/km and CAFE-IV to be effective from 2032-33 to 2036-37, setting a target of average CO₂ emissions to be less than 70 gCO₂/km.²

1. UC Davis commends and welcomes many aspects of the proposed standards

- 1.1. The adoption of slope-wise CAFE target of 88.4 gCO₂/km in FY 2027-28 reducing to 71.5 gCO₂/km by FY 2031-32 translating to an average annual improvement of 5% Y-o-Y over the five-year period (Reference – Section 4, sub-section 1(b), Table 1, page 3) is a welcome development.

The annual targets provide flexibility to manufacturers, and a clarity on industry outlook, while also ensuring effective compliance from manufacturers, and avoiding regulatory market shocks.

- 1.2. Annual reporting and assessment timeline beginning from FY 2026-27 would ensure compliance with the proposed standards from FY 2027-28 to FY 2031-32.
- 1.3. Providing highest super credits to battery-electric vehicles (BEVs) compared to other powertrain technologies reinforces the technological maturity, economic viability and environmental benefits of BEVs for India aligning with the global automotive markets.
- 1.4. Adopting ambitious but achievable standards would incentivize industry to invest in innovation and production of fuel-efficient vehicles and electric vehicles.
- 1.5. The provision in Section 9 to modify, amend, or rescind the regulation is appreciated.

¹ <https://udit.beeindia.gov.in/cafe/#1582101890364-da399f5a-6749>

² [https://beeindia.gov.in/sites/default/files/2024-](https://beeindia.gov.in/sites/default/files/2024-06/Inviting%20Comments%20on%20Proposal%20of%20Future%20CAFE%20-%20III%20and%20IV.pdf)

[06/Inviting%20Comments%20on%20Proposal%20of%20Future%20CAFE%20-%20III%20and%20IV.pdf](https://beeindia.gov.in/sites/default/files/2024-06/Inviting%20Comments%20on%20Proposal%20of%20Future%20CAFE%20-%20III%20and%20IV.pdf)

2. Proposed Amendments

Comment 1: Industry weighted average of unladen mass of passenger cars (Reference – Section 4, sub-section 1(a), 1(b))		
Issue	Comments	Proposed Amendments
The existing industry average weight considered in the formula to calculate average fuel consumption standard does not represent the industry average weight of the existing models in the market.	- The industry average weight considered in the formula is taken as 1,170 kg, which is about 13% lower than the industry average weight of ~1,350 kg as per the existing models available in the market. - This indicates that for a market with an average weight higher than 1,170 kg, it essentially reduces the effective stringency target for OEMs producing heavier cars with an average fleet weight higher than 1,170 kg, thereby acting as a barrier to incentivize product innovation.	Increase the industry average weight (value of 'b' in the formula for calculating average fuel consumption standards, Table 1) to ~1,350 kg to represent the existing market average weight to create a level-playing field for all manufacturers and incentivize producing lighter vehicles [Target = $0.002X(W - 1350) + c$].
Comment 2: Volume derogation factors for super credits (Reference – Section 4, sub-section 6, Table 3)		
Issues	Comments	Proposed Amendments
In the current draft, the super credits are proposed to be constant for all the vehicle technologies over the five-year implementation period, 2027-28 to 2031-32. Constant super credits could limit economies of scale for BEVs.	Global evidence is clear that BEVs are market-ready and need economies of scale. - However, constant super credits for all technologies including BEVs would reduce compliance burden for manufacturers, and fail to incentivize production of more clean vehicles, delaying benefits from economies of scale. Additionally, Indian OEMs may risk losing out on product innovation and their export competitiveness in the global market. - Major markets have instituted an annually declining super credits with phasing-out over a four- or five-year period such as	- Introduce annually diminishing super credit schedule for the vehicle technologies and provide a credit phase-out schedule for super credits across the implementation period (2027-28 to 2031-32). - The proposed schedule reduces the super credits for PHEVs, SHEVs and FFVs to 1 by 2029-30, while for BEVs to 1 by 2031-32

	the European Union (2 in 2020 to 1 in 2023), China (2 in 2021 to 1 in 2025)³. • A high value of super credits for technologies including SHEVs, PHEVs and FFVs could distort market investment impacting BEV adoption ambitions for India.	(see Annexure 1, Table 1) in this document.
Comment 3: Carbon Neutrality Factor (CNF) for petrol, CNG and flex fuel ethanol vehicles (Reference – Section 4, sub-section 5)		
Issues	Comments	Proposed Amendments
The draft proposes CNF to account for potential net CO ₂ emissions from conventional vehicles by discounting tailpipe emissions by 8% for E20 petrol vehicles, 22.3% for FFVs and 5% for CNG vehicles.	• Unlike fuel efficiency improvement, there is limited literature to corroborate CNF based CO₂ emission reduction. • A high discount through CNF, a technology that is yet to bring innovation could potentially disincentivize manufacturers to scale mature technology like BEVs, delay transition and limit product innovation for ICE vehicles. • Out of the six OEMs contributing over 90% of sales, three have a CNG-heavy product portfolio while only two have BEV products. Therefore, additional relaxations such as CNF for CNG may potentially redirect product offerings and investment towards CNG to achieve compliance. • CNF for ICE and alternate fuels would also impact investment in EV and EV components limiting India's aspirations to become an integral player in global EV supply chains.	• Review and reduce the CNF given to E20 petrol, CNG and FFVs • Reduce the CNF annually for all the alternate fuels reaching 0% by FY 2030, aligning with the annual diminishing super credits (see Annexure-2, Table 2 in this document)
Comment 4: Small petrol cars emissions relaxation (Reference – Section 4, sub-section 4)		
Issues	Comments	Proposed Amendments
Only small petrol cars (with unladen mass up to 909 kg, engine	• Such relaxation for small petrol cars would limit technological innovation in these cars and not incentivize manufacturers to	• Remove such relaxation and bring small petrol cars at par with the

³ <https://theicct.org/wp-content/uploads/2023/09/Table-8.-Overview-of-different-vehicle-super-credit-systems-in-fuel-economy-standards.pdf>

capacity not exceeding 1200 cc and length not exceeding 4000 mm) get an additional 3 g CO ₂ /km relaxation without any technology-related emissions reduction while calculating the emissions performance of a model.	produce smaller BEVs (which usually have a higher unladen weight than ICE) to accelerate adoption. • They also do not create a level-playing field for all manufacturers, especially disincentivizing BEV product development in the small car segment.	technology-related CO ₂ emissions reduction relaxation
Comment 5: Timeline and conversion factor of shifting from MIDC to WLTP testing procedure <i>(Reference – Section 4, sub-section 8)</i>		
Issues	Comments	Proposed Amendments
Lack of a clear timeline for shifting to WLTP and a conversion factor from MIDC to WLTP	• A shift to WLTP would align India’s testing procedures with the global standards and could expand opportunities for collaboration on testing and reporting standards with Global South countries. • • Until the WLTP is notified separately by Ministry of Road Transport and Highways (MoRTH), and the conversion factor is notified by Ministry of Power (MoP), the manufacturers are required to declare their CO₂ performance for both MIDC and WLTP test procedures from FY 2027 onwards increasing their testing and reporting requirements.	• Include a clear timeline for shifting to WLTP in the notified regulation. • Include a conversion factor from MIDC to WLTP in the notified regulation to reduce the testing and reporting requirements for the manufacturers.

3. Additional Recommendations

- **Introduce a provision for Credit trading mechanism** - Inclusion of a provision to allow for credit trading mechanism in the future must be included under the existing Section 9 that foresees a 'need for amendment' in future, as technology matures. Provision for trading regulatory credits generated by OEMs in exchange of monetary benefits from other OEMs to meet compliance targets as specified in this regulation, can serve as a self-financing mechanism. A credit trading mechanism would provide greater flexibility to OEMs, incentivize technology innovation in products, and act as an incentive for compliance, while driving the production and sales of ZEVs.
- **Strengthen Penalty mechanism** – The draft includes an annual reporting and assessment timeline but does not clearly define the penalty imposition timeline in case of non-compliance.
- Encourage more evidence-based research and create a provision to re-introduce CNF during the policy period, at a later date.

Annexure 1: Proposed super credits schedule with reference to Comment 2

Table 1: Proposed volume derogation factor for super credits for different vehicle types

Vehicle type	2027-28	2028-29	2029-30	2030-31	2031-32
BEV/ Range-extender hybrid EV	3	2.5	2	1.5	1
PHEV/ SHEV (flex fuel ethanol)	2.5	2	1	1	1
SHEV	2	1.5	1	1	1
Flex fuel ethanol	1.5	1.5	1	1	1

Annexure 2: Proposed schedule for CNF with reference to Comment 3

Table 2: Proposed annual diminishing CNF for alternate fuels

Vehicle type	2027-28	2028-29	2029-30	2030-31	2031-32
E20 petrol	8%	4%	0%	0%	0%
CNG	5%	2.5%	0%	0%	0%
Flex Fuel ethanol	22.3%	11.15%	0%	0%	0%