

## National Transport Decarbonisation Council (NTDC)

## Minutes of the Meeting

Inception Meeting - July 20, 2022, 1500-1630 hours IST

The inception meeting for the National Transport Decarbonisation Council (NTDC) with the core group members was held on July 20, 2022, with the welcome address by Mr Sharif Qamar, Fellow and Area Convenor, TERI and introductory comments on transport decarbonization and NTDC by Mr Shri Prakash, Distinguished Fellow, TERI. Ms Ruchika Mattoo, Associate Fellow, TERI introduced the core group members and made a brief presentation on NTDC for context setting. The discussion on all three subjects Vehicle Scrappage Policy, Emission Reduction and Efficiency Improvement, and Biodiesel as Fuel, was moderated by Mr I V Rao, Senior Visiting Fellow, TERI. There was good participation by all participating members representing all stakeholders. The details of the discussion on the three identified issues are given below. At the end, Mr Shri Prakash thanked all members for their active participation.

**Dr A R Sihag, Distinguished Fellow, TERI** gave a brief outline of the approach to the selection of the three themes.

Vehicle Scrappage Policy which has been notified recently has carried essential issues. Though it has taken 20 years to be formulated, it is still a work in progress and requires a review of objectives and how it can be implemented on-ground after identification of challenges.

In the case of emission reduction and fuel efficiency, the shift from BS-IV to BS-VI was an unprecedented step globally that required technological changes and big investments, but frequent or sudden changes are difficult, and the industry may not be able easily absorb it. Affordability of the changes is a big factor among the Indian consumers, who are value-conscience with low purchasing power, and need a balance between economic activity for growth and simultaneously achieving environmental goals. Biodiesel policy has already been introduced and requires a comprehensive view from source to end-use to see the overall impact of biodiesel vis-à-vis conventional fuels.

Mr Abhay Bakre, Director General of the Bureau of Energy Efficiency (BEE) highlighted the scope for flexibility in the implementation of the scrappage policy which is a demand-side policy. The next round of fuel efficiency norms for four-wheelers and heavy-duty vehicles (HDV) is being formulated. The Petroleum Conservation Research Association (PCRA) has apprehensions about compromise in food security but there is a scope for growth in biodiesel and the Ministry of Petroleum and Natural Gas (MoPNG) has aggressively been pushing forward biodiesel.

Mr Paresh Kumar Goel, Director (Transport & IC), MoRTH discussed the vehicle scrappage policy which is a voluntary policy based on the fitness of the vehicle. He talked about the challenges that the ministry is currently facing in the establishment of Automated Testing Stations (ATS) and vehicle scrappage centres across the country as this is an important step in the implementation of the policy.

Mr Amit Bhatt, Managing Director for India, ICCT commented on the debate on fuel versus food, but biodiesel requires long-term impacts on vehicle and mileage and the overall transport system. Fuel emission standards play an integral part in scaling electric mobility deployment.



**Ms Akshima Ghate, Managing Director, RMI** remarked on the challenges that need to be addressed to bring biodiesel a major share in road transport. The study should contribute to policy discussions on the next stage of emissions standards.

**Prof. Ashish Verma, IISc** suggested that the study should come up with real numbers on the percentage of mitigation of emissions and compare emissions in business as usual (BAU) and mitigation by each policy separately and all three policies together.

Mr Pawan Mulukutla, Program Director-Clean Mobility and Energy Tech, WRI stated the energy security and alternative fuel perspective for biodiesel. The scrappage policy ramification will add to demand in the ecosystem for new vehicles which will create an opportunity for a shift to public transport.

Ms Anumita Roy Chowdhury, Executive Director of Research and Advocacy, CSE highlighted that the objective of the council should be to make the policy more robust and make an effective impact to achieve the targets. She also discussed the need for clear guidance on incentive policy for fleet turnover and scrappage infrastructure. The policy should explore bringing the manufacturers' responsibility under the policy ambit. For fuel efficiency, fuel economy regulations must be set on time, and the evolution of standards along with the time frame and interim improvements should have a dynamic mechanism for all vehicle segments. The inclusion of super credits and carbon trading would require intense review. Biodiesel as an alternate fuel is a possible solution but there are concerns regarding land availability and food production issues and the source of the biodiesel. There is a requirement to evaluate actual emissions vis-à-vis more disruptive actions like electrification and assess the impact on vehicle performance, NOx emissions, etc.

**Dr Himani Jain, Senior Programme Lead, CEEW** commented on the impact assessment if the vehicle scrappage policy becomes mandatory with different incentives. The impact of biodiesel on the sustainable food system, land, etc. should be assessed.

**Mr N Sreekumar, Associate Director-Electric Mobility Program, SSEF** highlighted the importance of cross-linkages and synergy between the three policies. The regulatory framework should be developed with timelines and coordination with industries. We also need to consider the water and energy perspective.

**Dr Piyali Das, Senior Fellow, and Area Convenor, TERI** mentioned the issue with feedstocks is a major challenge in biodiesel. Despite the ease of production, it is difficult to cross the 5% blend mix in India due to the shortage of feedstock. Green diesel has a long-term prospect since it uses almost the same amount of methanol as biodiesel.

## **Closing Remarks**

The solutions to transport decarbonization should provide a boost to economic activity and achieve environmental goals parallelly. The way forward should be an integrated method in the regulatory approach which produces a more robust and effective policy. The actions can be categorised as short-term, transition, and long-term and should consider the timeline and the larger objective of transport decarbonization.

## List of participants and organizations

- Mr Abhay Bakre, Bureau of Energy Efficiency (BEE)
- Mr Paresh Kumar Goel, Ministry of Road Transport and Highways (MoRTH)
- Mr Joseph Teja, NITI Aayog



- Mr Sohinder Singh Gill, Society of Manufacturers of Electric Vehicles (SMEV)
- Prof. Ashish Verma, Indian Institute of Science (IISc)Bangalore
- Dr Gitakrishnan Ramadurai, Indian Institute of Technology Madras (IIT-M)
- Mr Amit Bhatt, International Council of Clean Transport (ICCT)
- Mr Anirudh Narla, International Council of Clean Transport (ICCT)
- Ms Harsimran Kaur, International Council of Clean Transport (ICCT)
- Mr Aviral Yadav, International Council of Clean Transport (ICCT)
- Ms Akshima Ghate, Rocky Mountain Institute (RMI)
- Mr Pawan Mulukutla, Clean Mobility & Energy Tech, WRI India
- Ms Anumita Roy Chowdhury, Centre for Science and Environment (CSE)
- Dr Himani Jain, Council of Energy, Environment and Water (CEEW)
- Mr Nilanshu Ghosh, Council of Energy, Environment and Water (CEEW)
- Ms Anuja Jadaun, The Climate Group
- Mr Kumar Nitant, The Climate Group
- Ms Narayankumar Sreekumar, Shakti Sustainable Energy Foundation
- Ms Priti Shukla, Shakti Sustainable Energy Foundation
- Ms Spurthi Ravuri, Centre for study of Science, Technology and Policy (CSTEP)
- Ms Ramya Natarajan, Centre for study of Science, Technology and Policy (CSTEP)
- Mr Sanjay Seth, The Energy and Resources Institute (TERI)
- Dr A R Sihag, The Energy and Resources Institute (TERI)
- Mr I V Rao, The Energy and Resources Institute (TERI)
- Mr Shri Prakash, The Energy and Resources Institute (TERI)
- Dr Piyali Das, The Energy and Resources Institute (TERI)
- Mr Souvik Bhattacharjya, The Energy and Resources Institute (TERI)
- Mr Sharif Qamar, The Energy and Resources Institute (TERI)
- Ms Ruchika Mattoo, The Energy and Resources Institute (TERI)
- Mr Rahul Chakraborty, The Energy and Resources Institute (TERI)
- Mr P. Santosh Kumar, The Energy and Resources Institute (TERI)
- Mr Faiz Jamal, The Energy and Resources Institute (TERI)
- Ms Shiren Pandita, The Energy and Resources Institute (TERI)
- Ms Rhea Srivastava, The Energy and Resources Institute (TERI)
- Ms Viral Joshi, The Energy and Resources Institute (TERI)
- Ms Palak Passi, The Energy and Resources Institute (TERI)
- Ms Akshaya Paul, The Energy and Resources Institute (TERI)
- Mr Piyush Saxena, The Energy and Resources Institute (TERI)