

Summary Report

Presentation Title: Euro 7 Regulation, AECC Projects Data and Technologies

Presenter: Mr Dirk Bosteels, Executive Director, AECC, Belgium, Europe

Presentation Date: Wednesday, 24th April 2024

Presentation Schedule: 1430 hr to 1645 hr IST (1100 hr to 1315 hr CEST)

Medium of presentation: Virtual MS TEAMS

Organised by: Emission Controls Manufacturers Association (ECMA), India

ECMA Participants: See Annexure-A – List of Attendees

A. Agenda and brief outline of the presentation

Session 01 –

- **About AECC – objectives, team, key issues**
- **Euro 7 update for light-duty and heavy-duty vehicles**
 - ✓ Steps involved for Euro 7 proposal from the start till the submission to European Council (EC) was presented highlighting the dates for the important stages
 - ✓ Implementation timelines, limits and other terms were presented which are submitted to EC
 - ✓ Formal adoption and publication are awaited.
 - ✓ AECC Fact Sheet was presented about myths and truths for Euro 7 pollutants limits for new vehicles in EU
 - ✓ definitions of geofencing, OBM and EVP were explained, which are new terms in Euro 7 proposal

Session 02 –

- **AECC demonstrator programmes for Light-duty (gasoline & diesel) and heavy-duty diesel vehicles**
 - ✓ AECC demonstrator projects on LD Gasoline, LD Diesel and Heavy-duty diesel were briefly presented covering
 - ✓ New Emission control techniques/systems were used on the base vehicles to demonstrate the feasibility of achieving ultra-low emissions under real-driving and cold-start conditions, specially focusing on NOx for LDV and NOx and Particle number for HDV, keeping Euro 7 limits as target
 - ✓ Emission performance with other fuels such as E10, e-gasoline, HVO, e-diesel were also presented
 - ✓ Potential of CO2 reduction on TtW and WtW basis were also presented for LDV-gasoline and HDV with different fuels

Session 03 –

- **CO2 review and CO2 neutral fuels for LD and HD**
- **H2-ICE**
- **NRMM**
- **Automotive Life-Cycle Assessment (A-LCA)**

B. General:

- It was informed that AECC is a part of informal working group of A-LCA at UNECE. AECC will extend its Well-to-Wheel study to A-LCA for LDV and HDV
- AECC shared the presentation in pdf form (52 slides) to ECMA for further distribution to the participants.
- Presenter suggested the participants to browse the links provided in the slides for further studies.

C. Summary of Questions asked during the presentation

(may not be in the verbatim format as asked)

1. What is the concept of “geofencing” and how does it impact us?
2. How a driver will know that he/she is entering into a zero-emission zone and what type of indications or warnings will be provided to the driver in that case.
3. In addition to focus on NOx emission study for LD demonstrator projects, what was the performance as regards PM and PN.
4. Euro 6 limits and Euro 7 limits are more or less similar for LDV segment except that PN-10 is introduced in place of PN-23, as the loading will go up. What could be the additional cost estimate for the Euro 7 exhaust after-treatment system for LD-gasoline and LD-diesel owing to new PN specifications and revised boundary conditions for RDE.
5. What is the extent of effectiveness of emission reduction with the introduction of Euro6 technology vehicles justifying the investment in technology and other areas are concerned? Was any assessment done of this aspect while preparing Euro 7 proposal OR demanded by any automotive industry/vehicle manufacturers association?
6. Is AECC disappointed since the limits for Euro7 for LD has been kept more or similar as that of Euro6e.
7. Is there any capping on fuel enrichment in the draft proposal of Euro 7?
8. Is there any OBD or OBM requirements for off-highway segment?
9. Regeneration Adjustment Factor (ki) has been declared in the Euro 6d procedure and to be measured as per NEDC or WLTC cycle. Is it same for Euro 7, in the situation that now emissions are required to be within limits in all conditions? And whether it is as per RDE rather than basis of any specific test cycle? This question is related to diesel vehicles.
10. Based on the results presented for HD RDE demonstrator project, is it going to be mandatory to use Electrically Heat Catalyst (EHC) for HDV-diesels, specifically concerning to cold-start emission controls.

D. Meeting ended with vote of thanks to the presenter and the participants

E. Annexure A- List of attendees

-----[Report by Neel Marathe, ECMA dt 26th April 2024]

Annexure A: List of Attendees from ECMA (as captured during the meeting)

#	Member Company	Name	Designation	Mobile no	email
1	Albonair India Pvt Ltd	G. Kavin Shyam Raj	AGM, Sourcing	7299016707	kavin.shyamraj@albonair.co.in
2	Albonair India Pvt Ltd	Y.S. Ananthkumar	DY. General Manager, Engineering & Development	9841327675	Ananthkumar.YeS@albonair.co.in
3	Albonair India Pvt Ltd	Sabareeswaran K	Senior manager, Development	9790294263	sabareeswaran.kalimuthu@albonair.co.in
4	Albonair India Pvt Ltd	Anil Chacko	AGM, After sales	9841383443	anil.chacko@albonair.co.in
5	Albonair India Pvt Ltd	Someswara Rao N	Assistant manager, Service /After Market sales	6385730252	someswara.nageswara@Albonair.co.in
6	Albonair India Pvt Ltd	Mahendra Kumar	Engineer, After sales/Tamil Nadu	6385730247	Mahendrakumar.perumal@albonair.co.in
7	Alkegen	Mr Avinash Khatal	Engineer, Application Engineer	9959100722	AKhatal@alkegen.com
8	BASF Catalysts India Pvt Ltd	Sundaravel. P.	Head – AE, LDG Application Engineering	9840305673	sundaravel.palanivelu@basf-catalystsmetals.com
9	BASF Catalysts India Pvt Ltd	Shravan Srisailam			Shravan.srisailam@basf-catalystsmetals.com
10	Bosch Limited	Vinod C	Senior Manager, PS-SB/ENS-IN (Engineering System, EAT)	9611921041	vinod.ch@in.bosch.com
11	Bosch Limited	Pavan Kumar			Pavankumar.Chaganti@in.bosch.com
12	Bosch Limited	Arun N.			
13	Bosch Limited	Vinod Ch.			
14	Corning India	S K Singh	Commercial Director, India	9971109883	singhsk2@corning.com
15	Corning India	Nilesh Lende	Application Manager	7042269745	lenden@corning.com
16	Corning India	Aditya Bhimavarapu	System Engineer	8826521570	bhimavaav2@corning.com
17	Dinex Emissions solution India Pvt. Ltd,	Mr. Karthik T M	Engineering manager	9986026932	KTM@DINEX.IN
18	ECMA	Neelkanth Marathe	Executive Director	9975492651	neel.marathe@ecmaindia.com
19	Emitec Technologies India Pvt Ltd	Gaurav Heda	AGM - TPM	9503521007	gaurav.heda@emitec.com
20	Emitec Technologies India Pvt Ltd	Bhushan Rathod	Sr. Engineer - TPM	9511276522	Bhushan.rathod@emitec.com
21	Emitec Technologies India Pvt Ltd	Pramod Godse	DGM - Sales	8605015158	Pramod.godase@emitec.com
22	Ibiden India	Abishek Thalagavara	Business Head, Sales/DPF	9900035603	abishek.ind@ibiden.com
23	Ibiden India	Amit Padaki	Key Accounts Manager, Sales/DPF	9900035606	amit.ind@ibiden.com
24	Ibiden India	Sri Harsha	Assistant Manager, Sales/DPF	99010 67740	sriharsha.ind@ibiden.com
25	Johnson Matthey	Sudhagar VEDIAPPAN	Global Applications Dev Manager, Technology/Applns Engineering	7303159522	sudhagar.vediappan@matthey.com
26	Johnson Matthey	Kamlesh Tayade			Kamlesh.tayade@matthey.com
27	Mitsui-Kinzoku Components India Pvt Ltd	Manoj Badrinath Kale	Deputy Manager, Research and Development	7027753821	Manoj.b@mitsui-kinzoku.com
28	Mitsui-Kinzoku Components India Pvt Ltd	Suresh Kumar Megarajan	Manager, Research and Development	8930001252	suresh@mitsui-kinzoku.com
29	Mitsui-Kinzoku Components India Pvt Ltd	Imai Tsubasa	Asst General Manager, Research and Development	8930066620	ts_imai@mitsui-kinzoku.com
30	NGK Technologies India	Noriyuki Hibi	DGM, BD - Technical	--	n-hibi@ngkindia.co.in
31	NGK Technologies India	Neeraj Gautam	Senior Manager - BD	--	ngautam@ngkindia.co.in
32	Sharda Motor Industries Ltd	K Prakash	Senior Manager, Concept / Research & Development	9498054816	k.prakash@shardamotor.com
33	Sud-Chemie India P Ltd	Prakash Sardesai	Head --Application Engg & Business Dev, Air Purification	9822019112	prakash.sardesai@sud-chemie-india.com
34	Tenneco India	Naresh Phansalkar	Director, Engineering	8805725700	NPhansalkar@Tenneco.com
35	Tenneco India	Yogesh Choudhary	Manager, Engineering	8308812636	YChoudhary@Tenneco.com
36	Umicore Autocat India	Sandip Patil	Engineer, Product Management	9702632608	Sandip.Patil@ap.umicore.com
37	Umicore Autocat India	Avinash Magar	Sr. Manager, Product Management	9850394886	avinash.magar@ap.umicore.com
38		Chandra Gowda			

39		Pralhad			
40		Girish			
41		Harilal K S			
42		Madhan Kumar			
43	ECMA	Deepak Nigam	Manager	9810931760	Deepak.nigam@ecmaindia.in
44	AECC	Dirk Bosteels	Executive Director	+32 479298179	dirk.bosteels@aecc.eu