

Facing the Challenge of Future CO₂ Targets: Impact on European Passenger Car Technologies

Thursday, 18 June 2009

08:00 - 09:00	Opening of Registration	
	Welcome Address	
09:00 – 09:30	<i>F. Profumo, Rector, Politecnico Torino; A. Barberis, Honorary President of SAE Torino Group, Turin Chamber of Commerce; and T. Ryan, SAE 2008 President and Institute Engineer, SWRI</i>	
	Plenary Session	
	<i>Chairman: R. Rinolfi, Fiat Powertrain Technologies</i>	
09:30 - 09:50	The EU Commission Perspective — <i>G. Mattino, EC - DG Enterprise & Industry</i>	
09:50 - 10:10	Are Driving Cycles Representative of Real-World Conditions? — <i>T. Woll, Daimler</i>	
10:10 - 10:40	Networking Break	
10:40 - 11:00	The Contribution of Infomobility towards a Sustainable Mobility — <i>M. Mauro, Centro Ricerche Fiat</i>	
11:00 - 11:20	Strategies for the Worldwide Race to CO₂ Reduction — <i>A. Greaney, Ricardo</i>	
11:20 - 12:00	Discussion: Facing the Challenge of Future CO₂ Targets — <i>Led by R. Rinolfi, Plenary Session Chairman</i>	
12:00 - 14:00	Lunch	
	Advanced Powertrains Session <i>Chairman: M. Bargende, IVK/FKFS-Universität Stuttgart</i>	Aerodynamics and its Contribution to CO₂ Reduction Session <i>Chairman: A. Cogotti, SAE Fellow</i>
14:00 - 14:20	Powertrain Technologies for CO₂ Reduction — <i>L. Bernard, Fiat Powertrain Technologies</i>	The Contribution of Cooling Air Flow to Fuel Consumption of Passengers Cars — <i>T. Kuthada, IVK/FKFS-Universität Stuttgart</i>
14:20 - 14:40	Diesel Engines Right-sizing for Optimal NO_x and CO₂ Emissions — <i>G. Boretto, GM Powertrain Europe</i>	Ferrari Aerodynamic Approach to Environmental Issues: How Ferrari is Facing the Challenges Arising from Environmental Issues for its Future Road Cars — <i>F. Cannizzo, Ferrari – Italy</i>
14:40 - 15:00	An Approach to Compare Advanced Powertrains and to Rate Customer's Benefit for Small Vehicles — <i>M. Horn, J. Neubeck, J. Wiedemann IVK/FKFS, University Stuttgart</i>	Relationship between Real World Fuel Consumption and Aerodynamic Improvements — <i>A. Broniewicz, T. Walker, T. Hadzianagnostakis, Volvo Car Corporation</i>
15:00 - 15:20	Potentials of Downsizing and Friction Reduction for Future CO₂ Scenarios — <i>H. Busch, FEV</i>	Aerodynamics Development Strategies for Reduction of Vehicle CO₂ Emissions — <i>M. Islam, Audi AG</i>
15:20-15:40	MULTIAIR and High Efficiency Engines — <i>D. Micelli, Fiat Powertrain Technologies</i>	A Numerical Method for the Aerodynamic Optimization of Road Vehicles and its Application in the Development of New Vehicles — <i>R. Tregnago, Centro Ricerche Fiat</i>
15:40 - 16:10	Discussion: Advanced Powertrain Technologies Addressing Future CO₂ Targets — <i>Led by M. Bargende, Session Chairman</i>	Discussion: Aerodynamics Technologies Addressing Future CO₂ Targets — <i>Led by A. Cogotti, Session Chairman</i>
16:10 - 16:30	Networking Break	
16:30 - 18:30	Lab Tour — GM Powertrain and Politecnico Labs Please, no cameras or open-toed shoes.	

Updated 5/21/09 — program subject to change — for latest updates, visit www.sae.org/co2challenge

Friday, 19 June 2009		
	Hybrids & Powertrain Electrification Session <i>Chairman: G. Cipolla, GM Powertrain Europe</i>	Car & Transmissions Concepts Session <i>Chairman: J. Wiedemann, IVK/ FKFS-Universität Stuttgart</i>
09:00 - 09:20	Pathways for Reducing Vehicle CO₂ Emissions Based on Hybrid and Plug-in Hybrid Propulsion Concepts — Z. Filipi, University of Michigan	Vehicle Technologies for CO₂ Reduction — L. Orofino, Fiat Auto
09:20 - 09:40	Nissan's Comprehensive CO₂ Reduction Approach with Several Propulsion Systems — S. Yonetamari, Nissan Technical Center Europe	Weight Optimization in Car Body Engineering — S. Rolando, Italdesign-Giugiaro
09:40 - 10:00	General Motors Advanced Propulsion Strategy — M. Cisternino, GM Powertrain Europe	The Phylla Project — N. DiGiusto, Centro Ricerche Fiat
10:00 - 10:20	CO₂ Emissions Reduction: The Hybrid Challenge — M. Forissier, Valeo	Pininfarina Bluecar: Concept and Design — G. Cartia, Pininfarina
10:20 - 10:40	Networking Break	
10:40 - 11:00	Electrification of Powertrain a solution for CO₂ Reduction: HEV, PHEV, EV, Energy Storage and Transformation — P. Leteinturier, Infineon	Mechanical Improvement on Vehicle Friction — D. Ducci, SKF
11:00 - 11:20	Status and Trends of Li-Ion Battery Technology for Automotive Applications — Speaker TBD, SAFT / Johnson Controls	Efficiency of a Wet DCT for a High Performance Vehicle: Sensitivity Analysis and Measurements — C. Torrelli, C. Cavallino, F. Viotto, Oerlikon-Graziano
11:20 - 11:40	Flywheel-Based Hybrid Systems — J. Hilton, Flybrid Systems LLP – UK	Innovative Powershift AMT Concept — A. Serrarens, Drive Train Innovation, F. Amisano, Magneti Marelli
11:40 - 12:00	Discussion: Powertrain Technologies Addressing Future CO₂ Targets — Led by G. Cipolla, Session Chairman	Transmission and Drive Line Simulator for the CO₂ Challenge — D. Gagne, LMS
12:00 - 12:20		Discussion: Vehicle Technologies Addressing Future CO₂ Targets — Led by J. Wiedemann, Session Chairman
12:20 - 14:00	Lunch	
	Bio- and Alternative Fuels Session <i>Chairman: F. Millo, Politecnico di Torino</i>	Tires Session <i>Chairman: M. Velardocchia, Politecnico di Torino</i>
14:00 - 14:20	Concepts, Potentials and Challenges for SI-Engines with Hydrogen and Hydrogen-Enriched Gases — H. Eichelseder, D. Leitner, C. Skalla, TU Graz	EC Regulatory Trends in Tire Development — M. Spinetto, Pirelli
14:20 - 14:40	The Role of Natural Gas in the Future Scenario of Alternative Fuels — A. Gerini, Fiat Powertrain Technologies	Tire and Environmental Evolutionary Scenario — D. Labò, Michelin
14:40 - 15:00	Simulative Optimization of a 3-Cylinder CNG Engine Within a Parallel Hybrid Powertrain — D. Boland, M. Bargende, IVK University of Stuttgart, H.J. Berner, FKFS	Tire Modeling for Wear Minimization — F. Cheli, F. Braghin, S. Melzi, Politecnico di Milano
15:00 - 15:20	Networking Break	
15:20 - 15:40	Oil-Free Zone in the Province of Trento (Italy): the Case of Primiero and Vanoy Community — A. Fuganti, Centro Ricerche Fiat, L. Zeni, P. Secco, Fontana, ACSM Primiero, A. Marella, University of Padua	Bioplastic Opportunities In Automotive — C. Bastioli, Novamont
15:40 - 16:00	Well-to-Wheels CO₂ Reduction with Biofuels — B.M. Vaglieco, Istituto Motori C.N.R., Naples — Italy	Tire Development — Speaker TBD, Pirelli
16:00 - 16:20	SI Engines Fueling with E85: Challenges and Opportunities with 2nd Generation Bio-Ethanol — A. Vassallo, GM Powertrain Europe	Michelin Tyre Development — Speaker TBD, Michelin
16:20 - 16:40	Discussion: Bio- and Alternative Fuels Addressing Future CO₂ Targets — Led by F. Millo, Session Chairman	Tire Pressure Monitoring System — T. Hannon, TRW
16:40 - 17:00		Discussion: Tires Technologies Addressing Future CO₂ Targets — Led by M. Velardocchia, Session Chairman
17:00	Adjourn	

