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This paper must be cited as:

Bermúdez, V.; Luján, JM.; Pla Moreno, B.; Linares Rodríguez, WG. (2011). Effects of low pressure exhaust gas recirculation on regulated and unregulated gaseous emissions during NEDC in a light-duty diesel engine. *Energy*. 36(9):5655-5665.
doi:10.1016/j.energy.2011.06.061.



The final publication is available at

<http://dx.doi.org/10.1016/j.energy.2011.06.061>

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Additional Information

Figure Captions

Figure 1. Scheme of the engine layout with both high and low pressure exhaust gas recirculation (EGR) systems.

Figure 2. Evolution of the fuel mass consumed during the New European Driving Cycle (NEDC).

Figure 3. Total fuel mass consumed (a), and total Carbon Dioxide emissions (b).

Figure 4. Nitrogen Oxides (NO_x) emissions during the New European Driving Cycle (NEDC).

Figure 5. Total Nitrogen Oxides (NO_x) emissions.

Figure 6. Total Carbon Monoxide (CO) emissions.

Figure 7. Total Hydrocarbons (THC) emissions.

Figure 8. Hydrocarbons speciation for each tested configuration.

Figure 9. Evolution of the iso-Butene ($iso-C_4H_8$) emissions during the New European Driving Cycle (NEDC).

Figure 10. Evolution of the Benzene (C_6H_6) emissions during the New European Driving Cycle (NEDC).

Figure 11. Total formaldehyde (HCHO) emissions.

Figure 12. Total formic acid ($HCOOH$) emissions.

Figure 13. Nitrous Oxide (N_2O) emissions during the New European Driving Cycle (NEDC).

Figure 14. Maximum incremental reactivity of exhaust emissions.

Figure 1

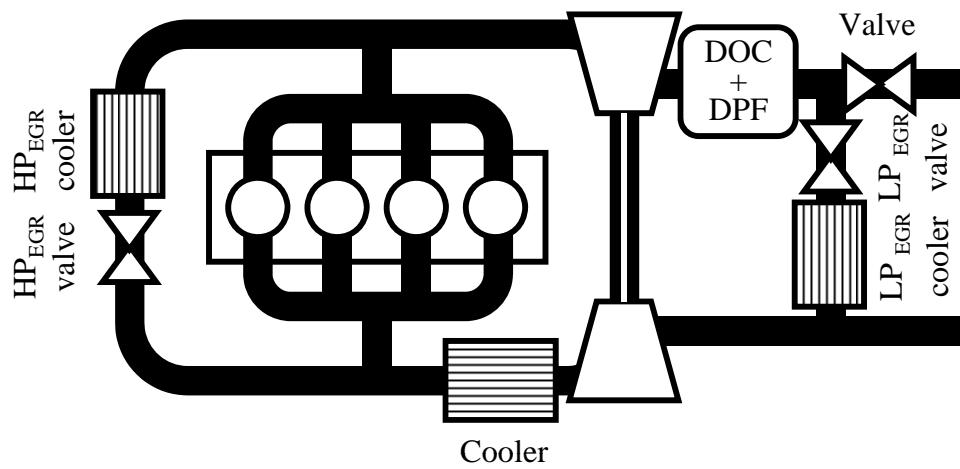


Figure 2

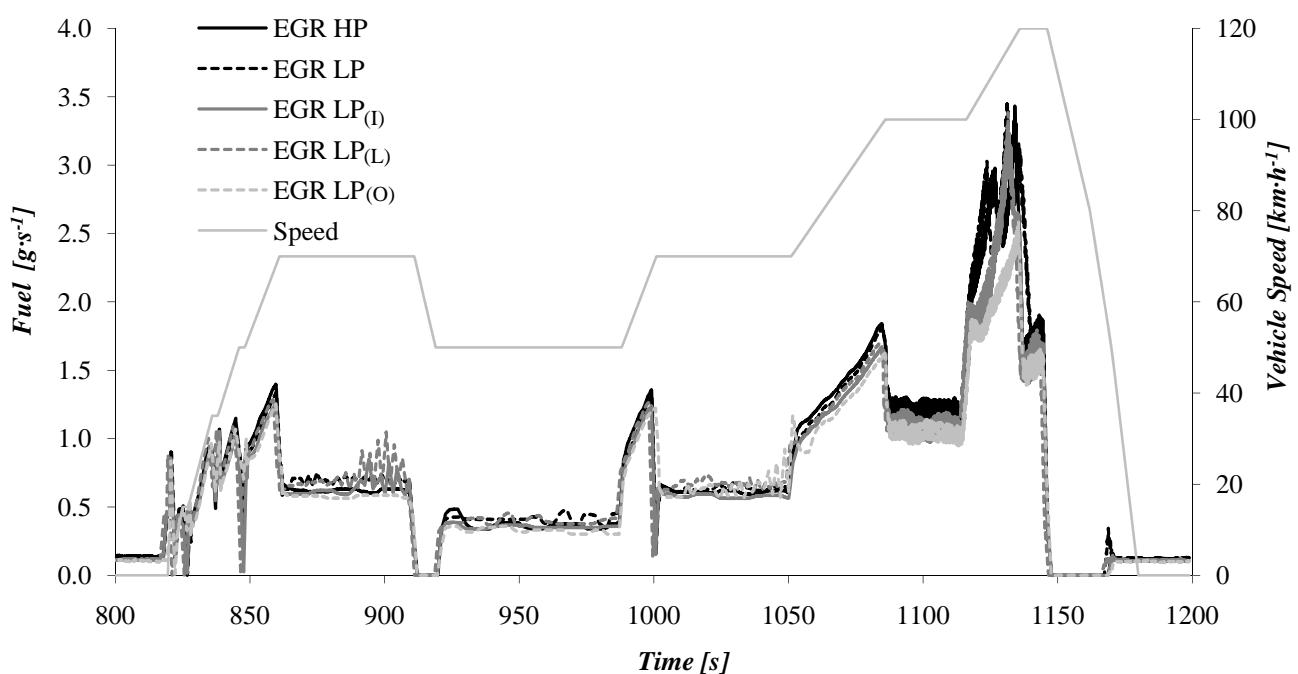
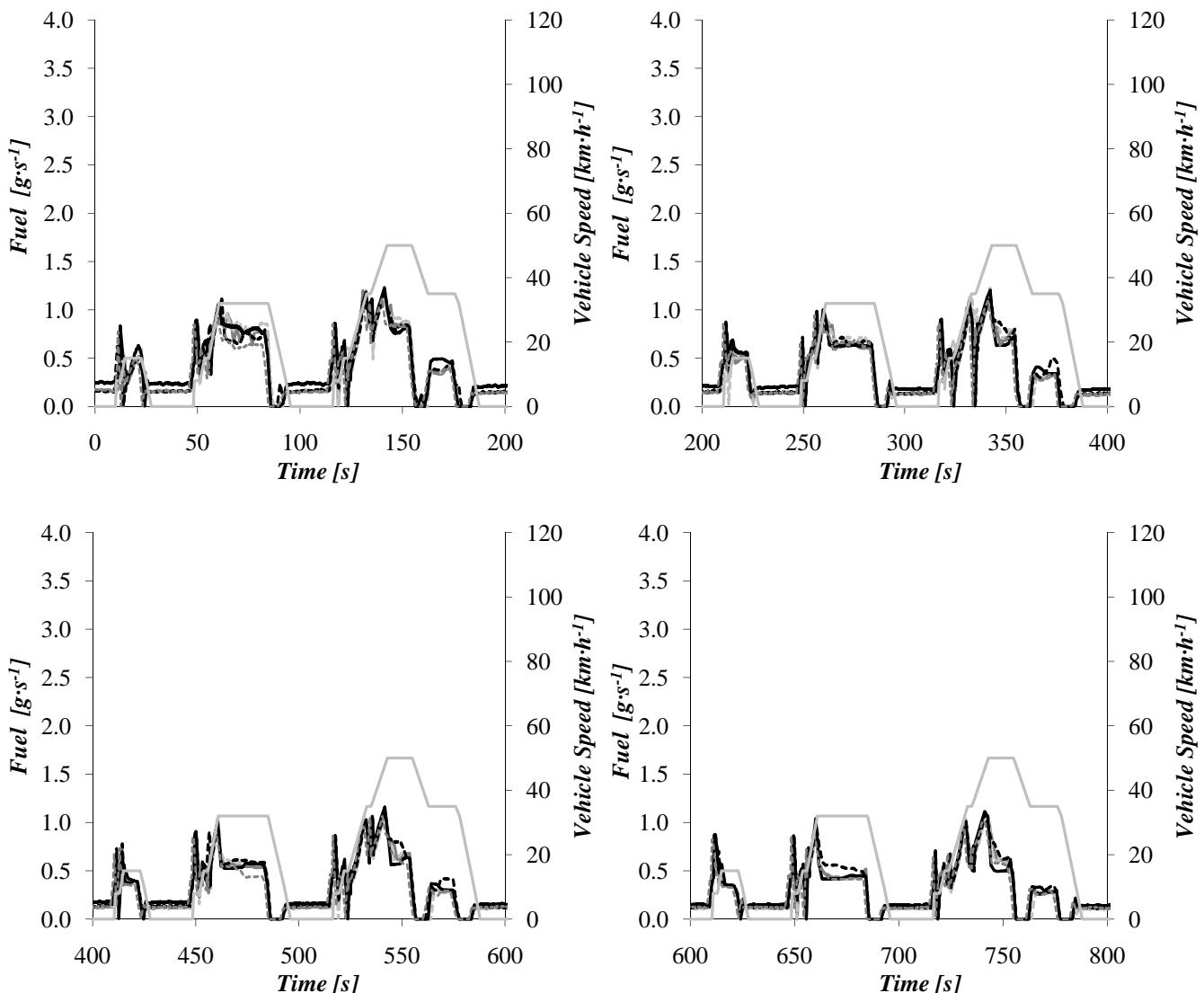
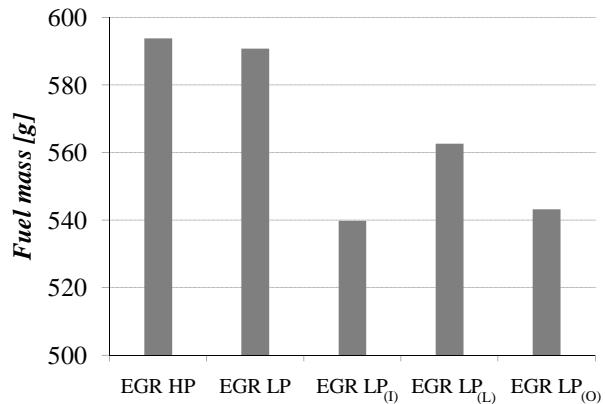
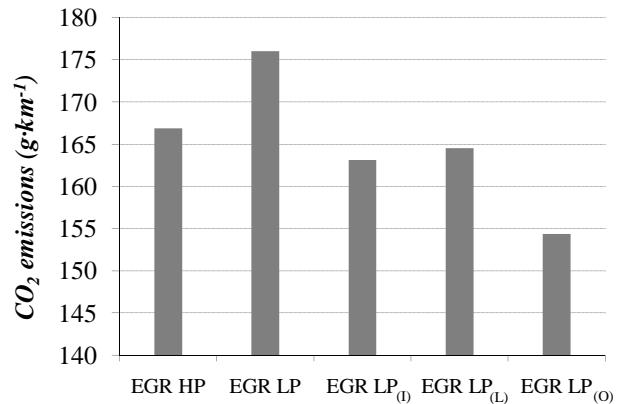


Figure 3



(a)



(b)

Figure 4

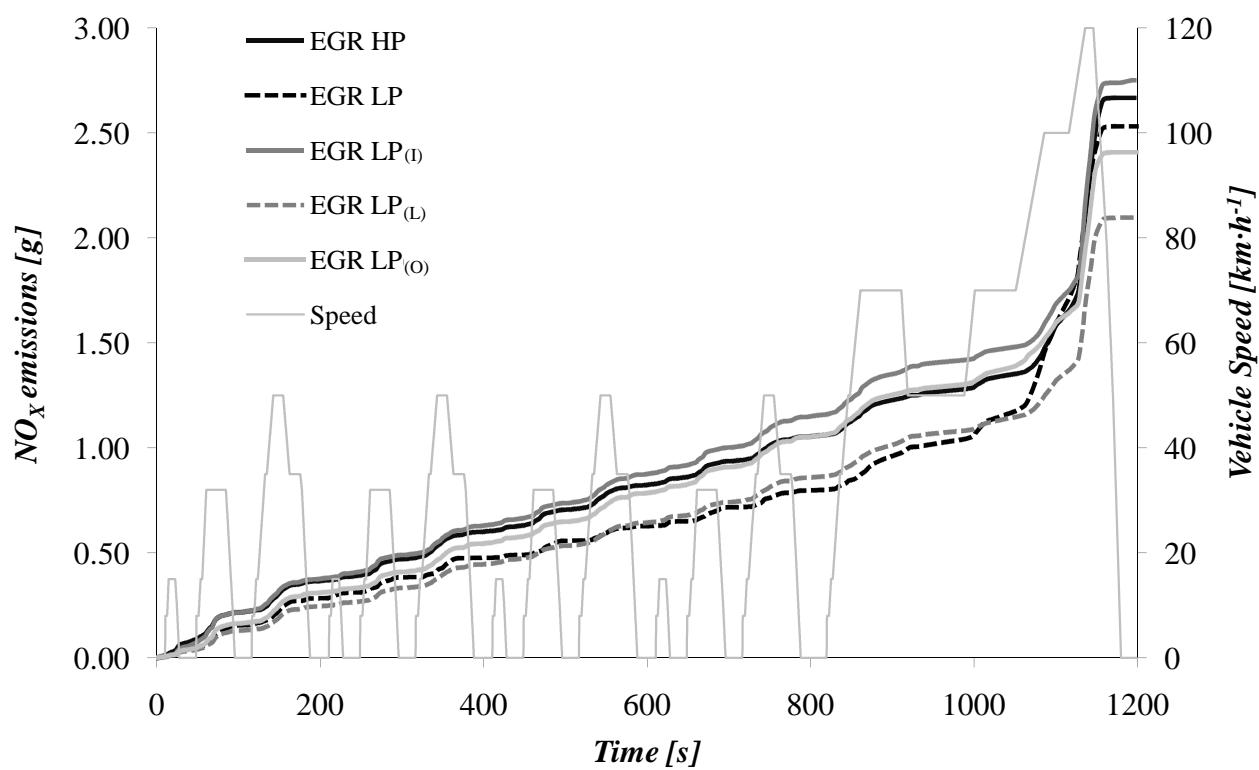


Figure 5

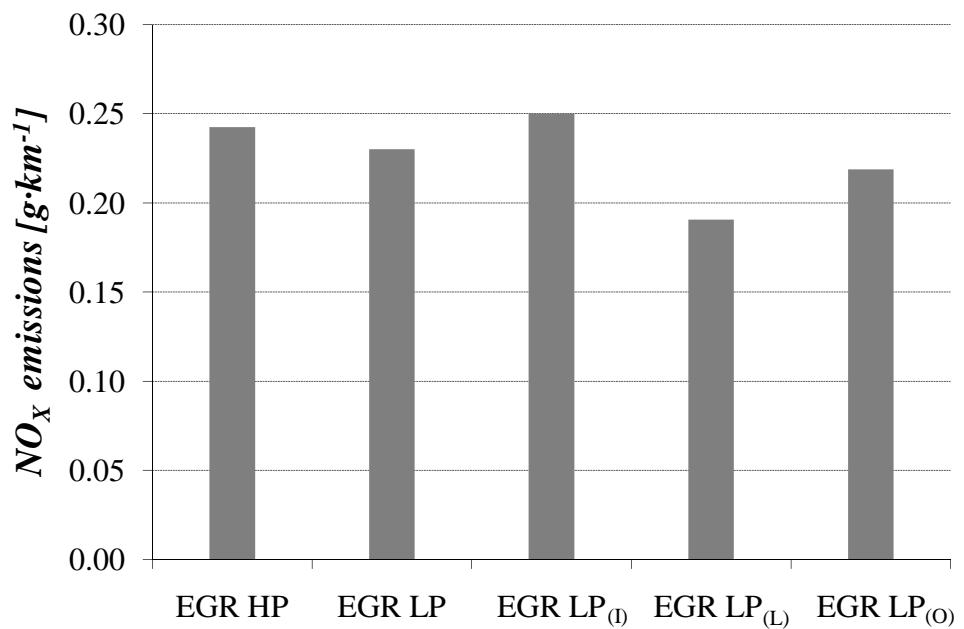


Figure 6

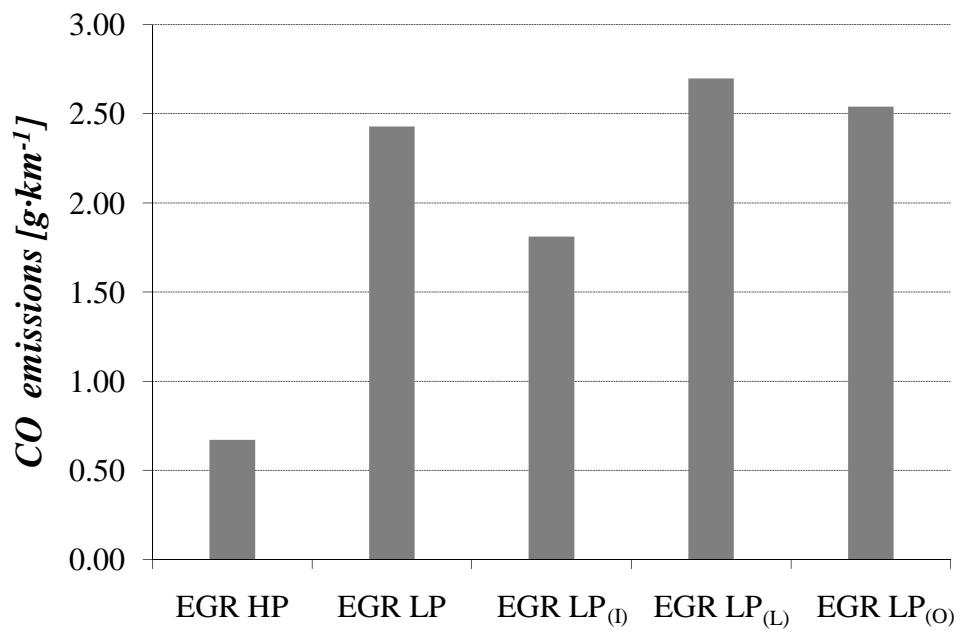


Figure 7

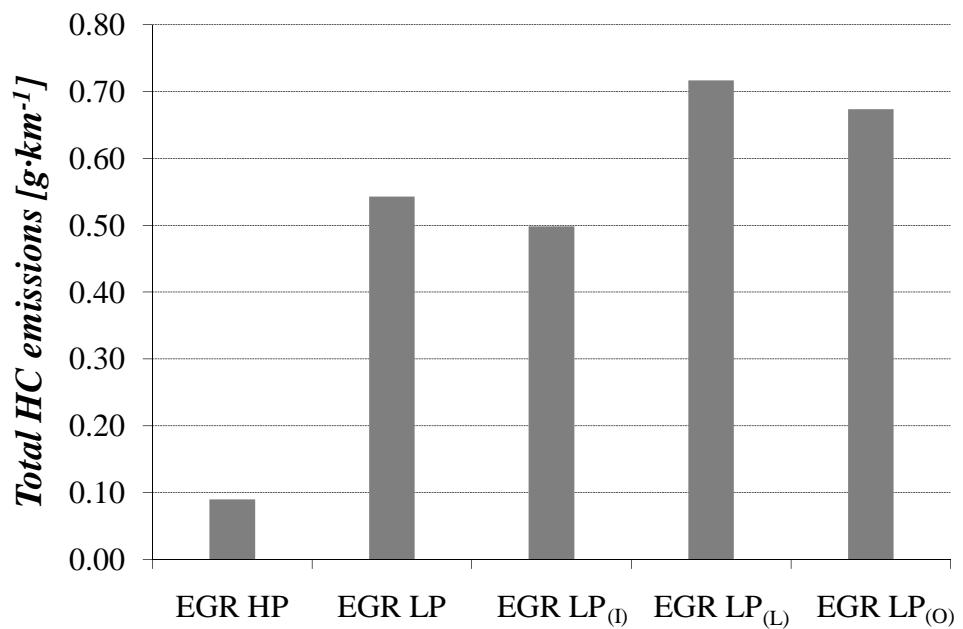


Figure 8

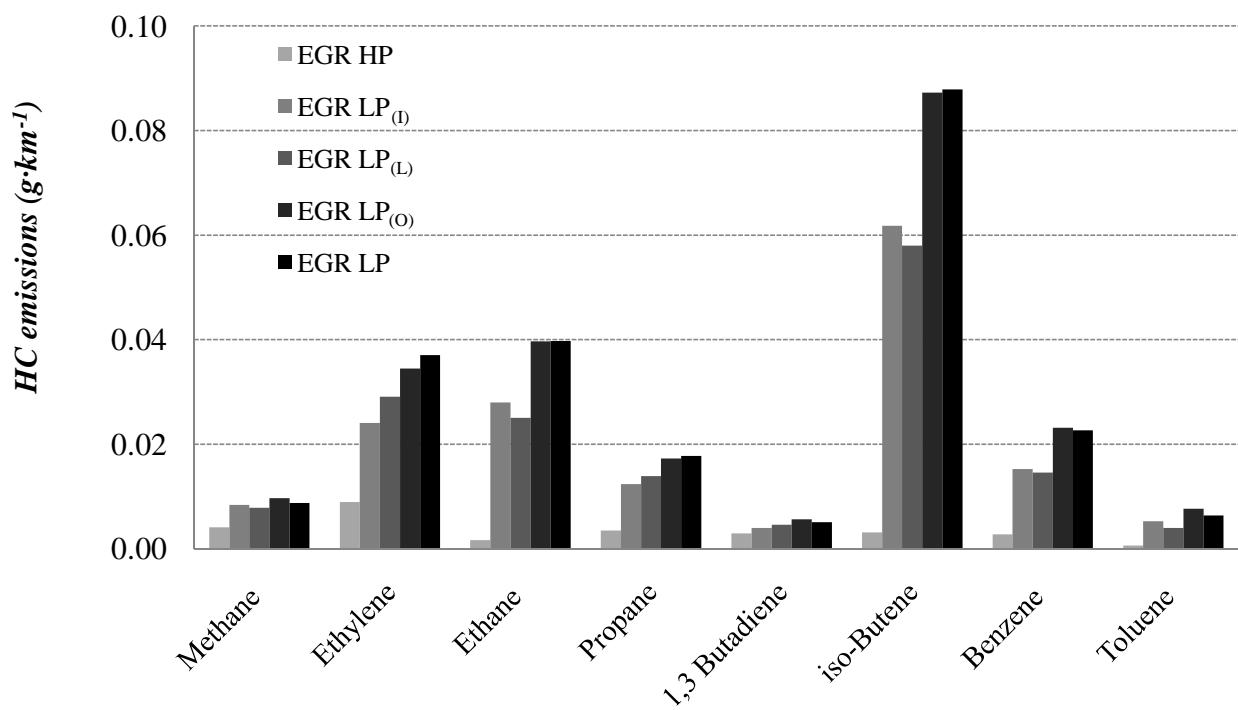


Figure 9

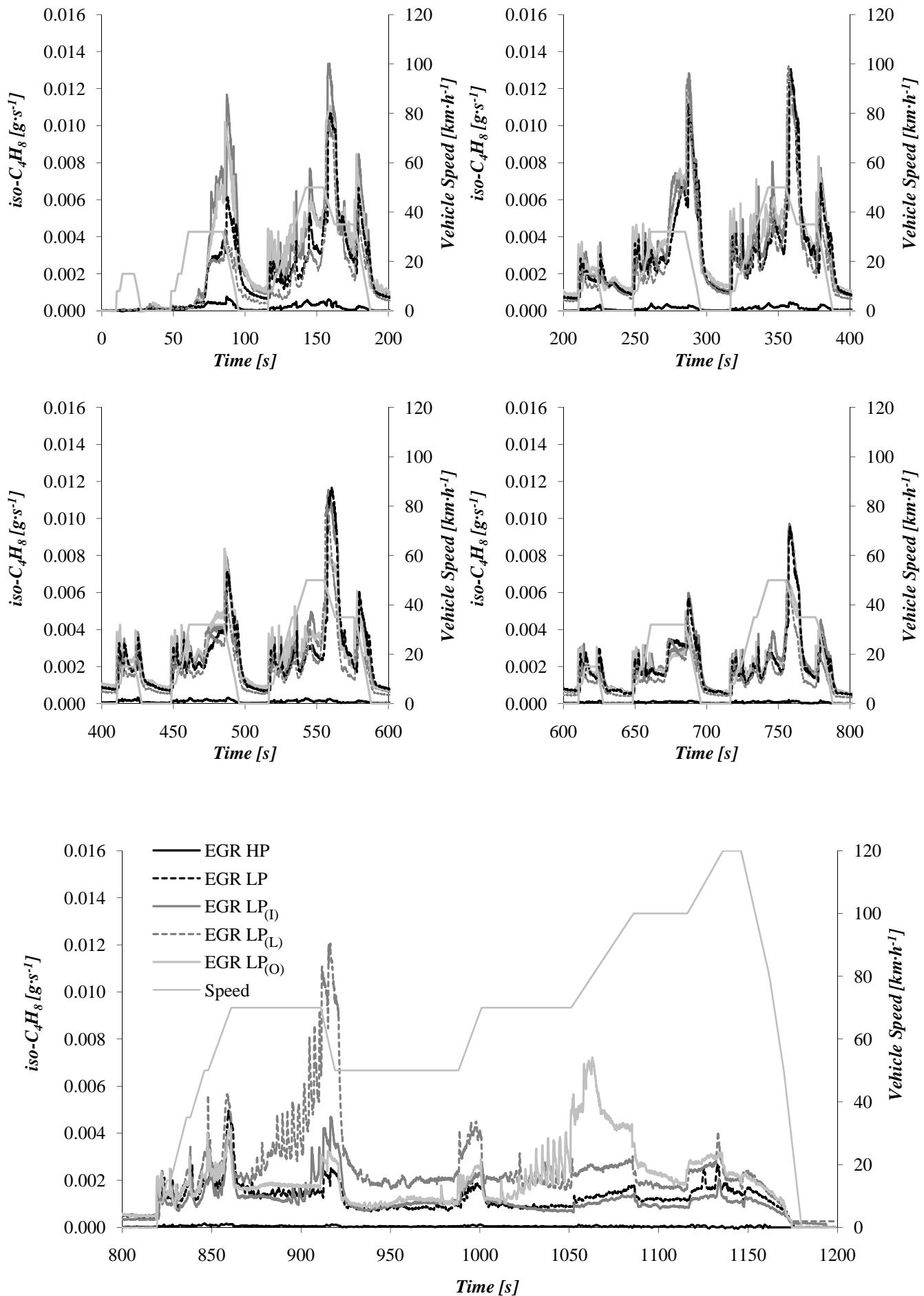


Figure 10

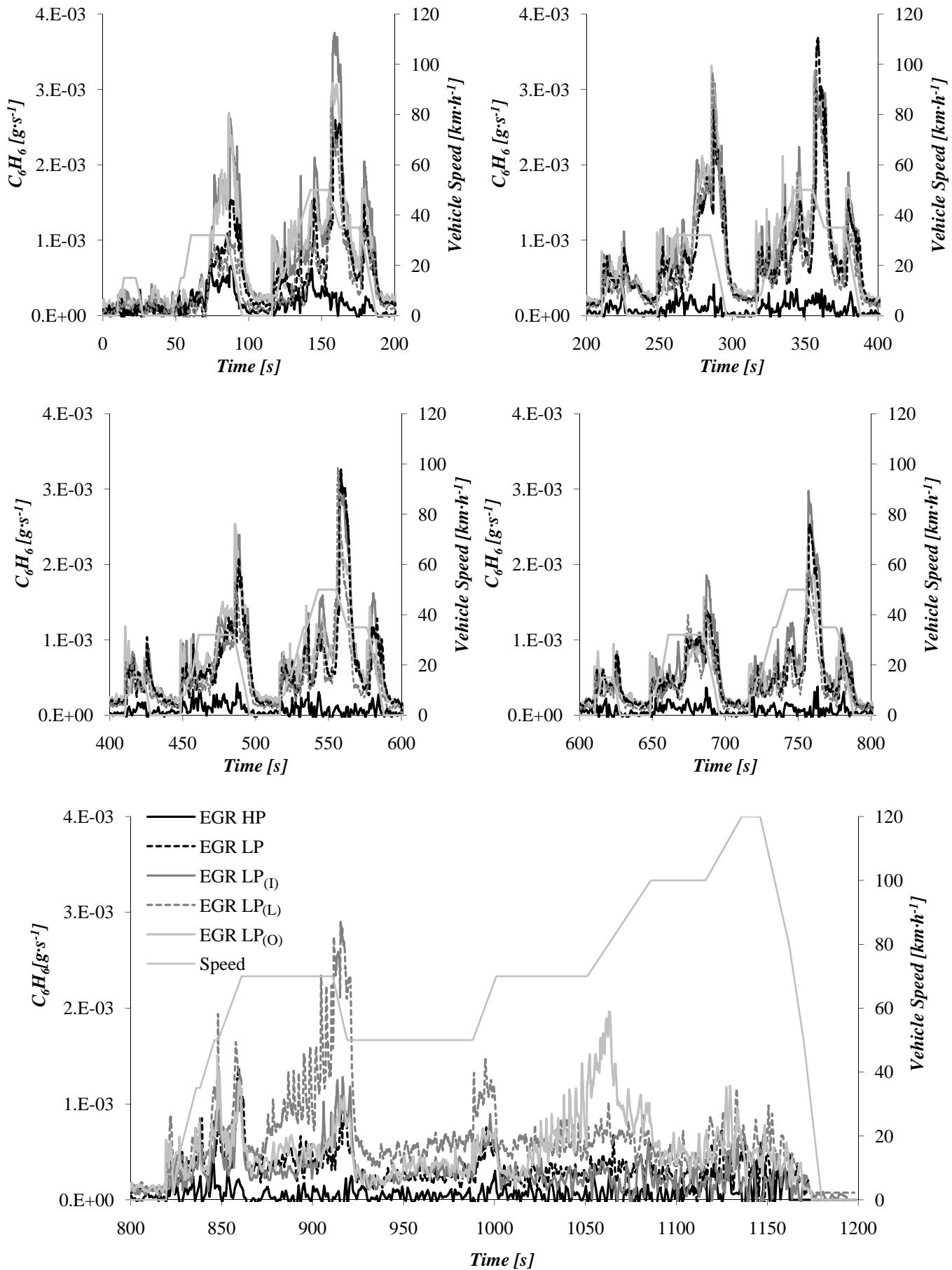


Figure 11

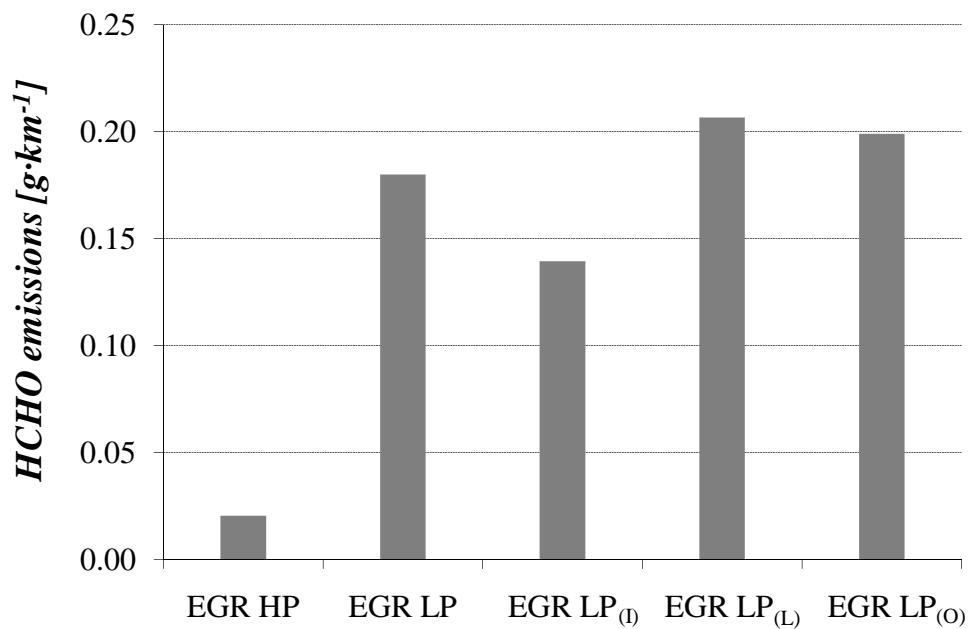


Figure 12

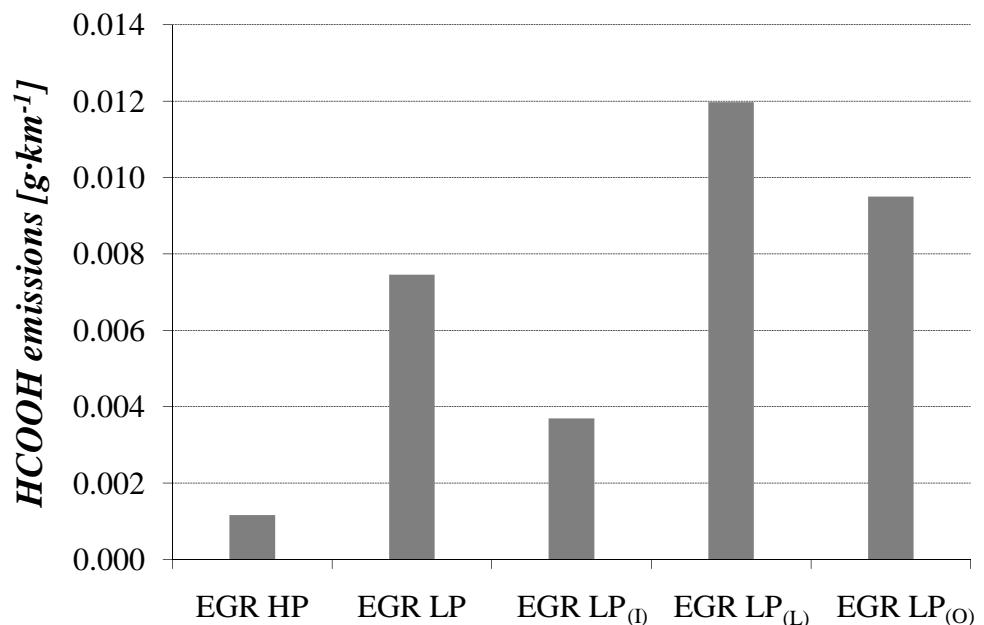


Figure 13

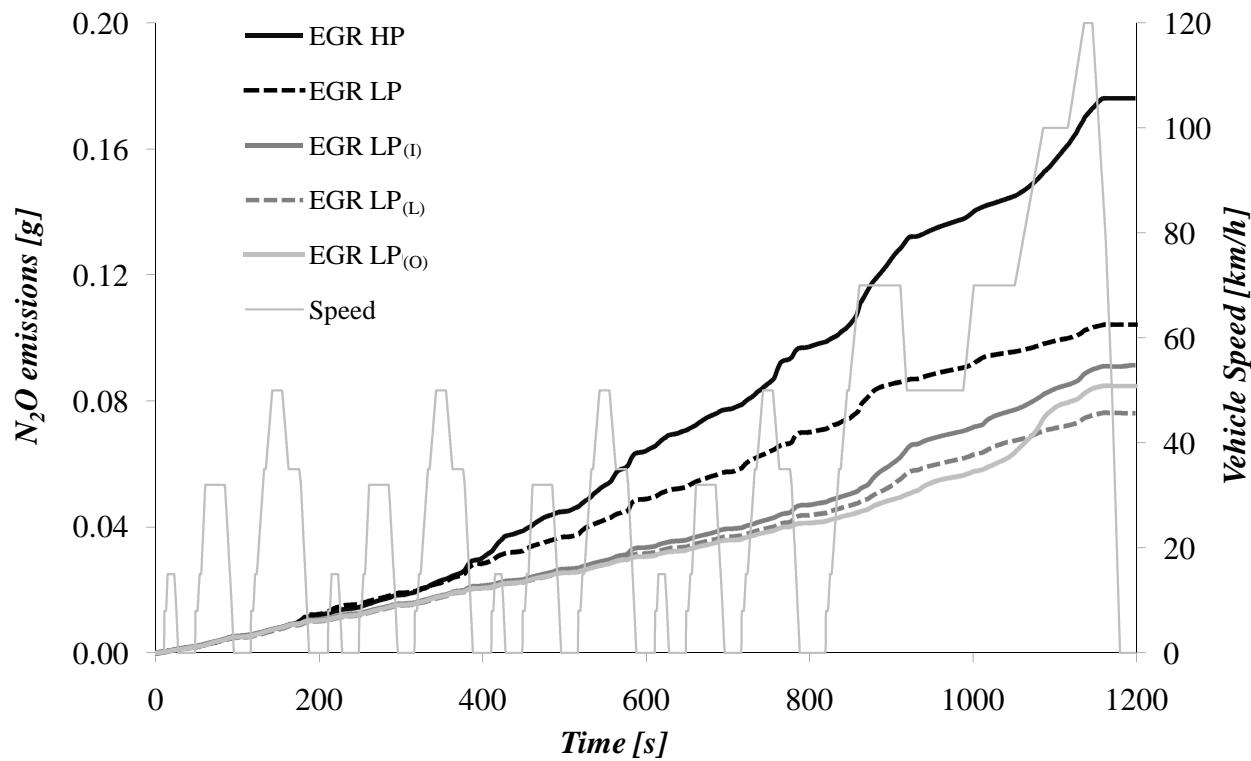


Figure 14

