

This study has been lead by the Engineering Laboratory of Internal Combustion of the Ben-Gourion University in Neguev, Israel.



The Engineering Laboratory of Internal Combustion of the Ben-Gourion University in Neguev studied the impact of **Xbee** on the pollutant gases emissions of a coach let by the company **Massiye Shasha**. This vehicle is in compliance with the Euro 2 Norm.

Two measures have been realized to be compared to each other. The first one was done on October 12, 2006 before adding **Xbee** to the fuel used by the vehicle. The second one is dated on October 29, 2006 after the coach drove only 4,274 kilometers with a **Xbee** fuel – i.e. around 70 hours of use. Of course, the coach has not been modified during these 17 days.



One more time, the results confirm what has already been observed in numerous other fleet of vehicles or vessels:

- ✓ HC, Hydrocarbons reduced by -43.94%;
- ✓ NO<sub>x</sub>, Nitrogen Oxide reduced by -25.77%;
- ✓ PST, Particles in Suspension Total reduced by -23.92%;
- ✓ CO<sub>2</sub>, Carbon Dioxide reduced by -28.46%; and
- ✓ O<sub>2</sub>, Oxygen increased by 38.35%.

Engines and fuels  
guarantees:

▫ **Xbee** is in compliance with the **CEC** tests, recognized by the **ACEA** that represents 13 of the main European vehicles manufacturers.  
<http://www.acea.be>



▫ On the other hand, **Xbee** respects the European regulation EN 590 Diesel norm and CSR 500 IFO 380 norm.

**Ben-Gourion University of the Neguev**

Pr. Eran Sher

Mechanics Engineering Department

IL-Beer Shev'a 84105

+972 (0) 8 647 7076

sher@bgu.ac.il

<http://www.bgu.ac.il>