Background information

In many cities of Vietnam, motorcycles are the dominant mode of urban transport, accounting for 95% of all vehicles. Many people choose this type of vehicle because of its usefulness, maneuverability and reasonable price. Preliminary investigations carried out in Hanoi and Ho Chi Minh City showed that people use motorbikes about 2-4 times daily for an average of about 20-30 km/day and 7250-8700 km/year. These vehicles are hence a major source of emissions such as: CO2, HC, VOC. Emissions from motorbikes are not entirely dependent on the number of vehicles and on the fuel consumption, depending also on, for instance, the fuel quality, the emission reduction technology mounted on the vehicle, and the regime of maintenance and reparation of the vehicle. In fact, average motorbike fuel consumption is only about one fifth compared to that of cars; nevertheless they can emit more toxic gases than a car if it has an outdated structure and technology (without the emission control system on the vehicle). According to the Viet Nam Environment Administration, emissions of CO2 and HC from motorbikes in Viet Nam are 6.4 times more than those of a car.
Because of the worsening air pollution, the Ministry of Transport has conducted research on the “Emission control scheme for motorbikes in the provinces of Viet Nam” to assess the situation and propose solutions, mechanisms and policies to implement inspection and emission control for these types of vehicles. The result of the project was approved by the Prime Minister through Decision No. 909/QD-TTg dated 17/06/2010.

**Policy Details**

As part of the emissions control scheme, periodic emissions tests are carried out on a range of subjects and routes in order to ensure compliance with emissions standards and conduct research for future regulations. Buildings are equipped with emissions control equipments, cameras, computer systems, and office equipment, and are all obliged to successfully meet the emission testing requirements. The size of the motorbike emission inspection stations is small, so the investment costs are not large and can be compensated by charging an appropriate inspection fee, as well as creating job opportunities for the people repairing and servicing the vehicles found to not be in compliance. Even though the costs of maintenance and repairing for vehicles that do not comply with emission standards are smaller, they are less economically efficient than vehicles with an emissions control system when taking into consideration the economic offsets obtained by fuel savings. In the period from March to August 2008, the service agency SYM-VMEP in Hanoi has carried out emissions tests on model motorbikes, in order to keep the project implementation in check.

The project’s focus has also been on information, marketing and public opinion. Information has been provided in a variety of forms, such as launching events, free emissions testing, workshops, preparing video clips and reports, media marketing (television, radio, print newspapers, magazines, online newspapers), which attracted the attention of the public. The scheme has an internet forum to exchange opinions on the project, which attracted the participation of ten thousand people. The public essentially agreed with the policies of the Motorbike Emission Control set out in the agenda. Management systems and other regulatory documents, technical guidance and guides with professional expertise on motorbike exhausts were also developed by the scheme in order to provide a framework for human resources training. In addition, a complete manual for testing the amount of motorbike emissions has been created, along with a guidance handbook for the use of motorbikes in a fuel-efficient and environmentally sustainable way for the purpose of raising public awareness on the implementation of the scheme.

**References**

The following documents informed the development of this paper:

Emission control scheme for motorbikes in the provinces of Viet Nam; Decision No. 909/QD-TTg dated 17/06/2010 of the Prime Minister.