



Car Pollution : Are We Tackling the Real Problems?

BY STEPHANE GAGNE

It is a known fact that automobiles contaminate the air in large cities, create health hazards and diminish our quality of life. Nevertheless, car pollution is socially accepted in the same way as is smoking or alcoholism. Why? Undoubtedly because cars represent freedom, success, the American dream and more.

The wide acceptance of automobiles, however, hinders the

implementation of real problem-solving measures. Solutions to health, noise and pollution problems would involve limiting the number of cars and car travel. Instead of directly facing these problems, we have applied stop-gap measures in order to make the use of cars more tolerable and even these have had limited effects.

Let's take noise pollution as an example. Since 1983, noise-abatement structures have been installed by the Ministry of

Transportation along some stretches of city highways. These structures have reduced noise levels by 5 to 13 decibels in some cases, and have generally brought down the noise level to between a tolerable 60 and 70 decibels. Although this is a step in the right direction, it is not feasible to install these structures along main downtown boulevards, where the noise remains elevated: in the vicinity of 90 decibels and sometimes higher. Regular and

long-term exposure to such high noise levels can impair hearing. Must we, as city dwellers, live with this pollution?

Another example is air pollution and cleaning it up. Improvements in fuel-burning techniques have greatly reduced polluting emissions. In fact, 95% of these emissions have been reduced since 1970.

A job well done, yet it is still inadequate since the automobile continues to be the greatest source of air pollution in our cities. The number of cars has risen (and continues to do so) and each car travels greater and greater distances, counteracting successful clean-up strategies such as those mentioned in the previous article. Governments, municipalities and even environmental groups are aware of the situation. We know that car use (and the resulting CO₂ emissions) are leading us directly toward the greatest environmental catastrophe of the next century: global warming.

If this is the case, why focus on reducing ground-level ozone instead of carbon dioxide? Maybe because ground-level ozone, the main component of city smog, causes a more serious and apparent public health problem than CO₂. Asthmatics are sensitive to the presence of ozone and at a concentration of more than 90 parts per billion (ppb), this pollutant can irritate the eyes as well as the lungs. It is also suspected that the volatile organic compounds (VOCs), which, along with nitrogen oxides make up ozone, are presently the most dangerous automobile emissions.

Even if VOCs are emitted in small amounts, they have worse effects on health than other car emissions since they have a very slow rate of dissipation, and eleven VOCs among the 147 analyzed by Environment Canada are known carcinogens, maintains Norman Richer, an environmental toxicologist. Richer believes that priority should be given to reducing carcinogenic VOC emissions.

How is it that we weren't concerned about these emissions in the past?

Earlier, the problem was not as acute since there were fewer cars, according to Luc Lefebvre, a toxicologist at the Montreal Public Health Department. Furthermore, in the 1970s we didn't know much about pollutants, and reducing CO₂ and lead emissions was the main focus of specialists in the field. Today CO₂ and lead emissions pose less of a problem, therefore we are able to turn our attention to VOCs and NO_x, pollutants that lead to ozone formation. Reducing emissions, however, will require a lot of political courage since there will be major costs. It would mean installing devices on cars, fuel trucks and service station gas pumps that would control gas fumes (harmful to health since they contain VOCs). Installing these systems could lead to an increase in the price of fuel and cars, believes Luc Lefebvre.

In the end, motorists are the ones who will have to pay. But the truth of the matter is that society has already absorbed these expenses through health, social and environmental costs, which are a direct consequence of uncontrolled pollution. Right now, these hidden expenses seem to be of little concern to most people, but should they turn into new, visible taxes, they would be more unwelcome...like the GST.

The introduction of CO₂ reduction measures would not go over well either- if they are ever introduced at all... But as unpopular as these measures may be, isn't it time that people were made to accept responsibility for the pollution they create, regardless of the costs? The next article in this series will outline the alternatives to the car and their effectiveness in reducing pollution. ♦

We'd like to thank Environment Canada, Quebec Region.



Photos Philippe Campeau / Montage Sylvain Auger

En bordure des grands boulevards, les niveaux de bruit sont très élevés; autour de 90dba et plus à l'occasion.

In the vicinity of principal arteries the noise level tends to be extremely high: approximately 90 decibels, and sometimes more.

Opter pour l'autobus est la meilleure des astuces.

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