

The Kyoto protocol, drawn up in 1997, is an international agreement whose goal is to reduce greenhouse gas (GHG)¹ emissions to 5% below 1990 levels. At this point, 75 countries, responsible for 36% of global emissions, have ratified the agreement. Reduction objectives set for each country will have to be met and maintained from 2008 to 2012.

The greenhouse effect is a natural phenomenon by which the atmosphere acts as an insulator to maintain the earth's global temperature at 15°C.

GHGs are gases present in the atmosphere that capture the solar energy reflected by the earth. Concentrations of such gases are responsible for the increased warming of the atmosphere, thus enhancing the greenhouse effect. This, in turn, has dire consequences on the environment, with all that results: more intense, prolonged and frequent heat waves, proliferation of tropical diseases, rising sea levels and flooding.

It is estimated that the earth's temperature has risen by 0.3°C over the last 130 years. However, because human activities generate an increase in gas emissions, it is forecast that temperatures will rise by an equivalent amount, decade after decade, for the foreseeable future.



Canada² is facing a major challenge. GHG emissions increased by 13% between 1990 and 1999, and the country must now reduce emissions by 24% by 2008 to meet its obligations within the agreement.

It was estimated in 1996 that 37% of GHG emissions in Quebec came from automobiles, 34% from the industrial sector and 19% from other sources³.

In urban areas, as little as 3 % of GHG emissions is caused by public transit. In this context, one realizes that public transit will have an important role to play in future years by offering a valid alternative to the GHG problem.

1. The gases targeted by the Protocol are carbon dioxide, nitrous oxide, methane, CFCs (chlorofluorocarbons), and sulfur hexafluoride.
2. *Troisième rapport annuel du Canada sur les changements climatiques*, Government of Canada, January 2002.
3. Ministry of the Environment (Quebec).