During the decade from the early 1970's to the early 1980's, SO_2 emissions in eastern Canada were reduced by more than 40%. This was done to protect local air quality as well as to reduce long range transport of sulphate. In the United States, there was a corresponding decrease of about 25% to protect local air quality. Canadian scientists have analyzed runoff data from twelve Nova Scotia rivers for this time period and have found the expected decrease in acidity in the rivers. These data confirm the validity of the Canadian actions to control of acid rain.

The Canadian acid rain abatement program is driven by the twenty kilogram objective. Reducing loadings to this level requires a reduction of about 50% in the total SO_2 emissions east of the Saskatchewan-Manitoba border along with compatible reductions in the SO_2 flowing in from the United States.

In February 1985, the Environment Ministers of the Governments of Canada, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland agreed to reduce SO_2 emissions from the 1980 base by approximately 50% by 1994. At the same time, they agreed to an initial interprovincial allocation of reductions.

Tabular summary of past and projected changes in total central and eastern Canadian SO_2 emissions by sector:

SULPHER DIOXIDE EMISSIONS

(thousands of metric tonnes per year)

	1970	1980	1994
Smelters	3,810	2,720	1,150
Utilities	470	730	450
Non-utility fuel use	950	580	300
Other	410	490	400
TOTAL	5,640	4,520	2,300

The provinces are in the process of enacting regulations to implement the new program. The two largest provincial emitters of acid gases, Quebec and Ontario, have now done so. Together they account for three-fourths of eastern Canadian SO_2 emissions.

The main elements of the Quebec and Ontario programs are as follows: