

ferrous smelters are projected to decrease to 0.5 million tonnes by the year 2000 from 1.4 million tonnes in 1980 as all non-ferrous smelters, due to existing regulatory requirements, must achieve approximately 90% reduction in SO₂ emissions from uncontrolled levels. However, non-ferrous smelters in the U.S are located in western and southwestern states and are therefore unlikely to play a significant role in the eastern North America acid precipitation issue. Emissions of SO₂ from other industrial processes are projected to decrease by about 50% by the year 2000 to about 1.5 million tonnes.

In Canada, total emissions of SO₂ to the end of the century are expected to decrease slightly from 4.8 million tonnes (1980) to 4.4 million tonnes (2000). Sulphur dioxide emissions from thermal power plants are expected to decrease slightly from 0.8 million tonnes in 1980 to 0.7 million tonnes by the year 2000. Although the emissions of SO₂ from power plants in Western Canada are projected to increase from about 80 kilotonnes in 1980 to close to 290 kilotonnes by the year 2000, this increase will be offset by decreases in SO₂ emissions in the Maritime Provinces and by decreases in SO₂ emissions from power plants in Ontario. Recent regulatory requirements announced by the Ontario government will limit the emissions of SO₂ from Ontario power plants to 260 kilotonnes/year by 1990 from the current 400 kilotonnes/year.

Sulfur dioxide emissions from industrial, commercial and residential fuel combustion are projected to decrease significantly from 0.8 million tonnes in 1980 to 0.25 million tonnes by the year 2000. The underlying assumption here, as reflected in the Canadian National Energy Plan (NEP), is the conversion to the use of natural gas from petroleum fuels.

Projected SO₂ emissions from Canadian non-ferrous smelting complexes to the year 2000 indicate a maximum of about 2.2 million tonnes per year, essentially the same level as in 1980. The level attained will depend on market fluctuations assuming no technological improvements are made at the various smelters. Emissions from other industrial processes are projected to increase from about 0.9 million tonnes in 1980 to close to 1.1 million tonnes by the year 2000. This increase is due primarily to an increase in SO₂ emissions in Western Canada based on the assumption that projected tar sands and natural gas development projects will proceed as scheduled. Recent events suggest that this assumption may no longer apply.

With respect to the emissions of NO_x to the year 2000, total U.S. emissions are projected to rise from about 19 million tonnes in 1980 to about 24 million tonnes by the year 2000. In Canada, the emissions are also projected to rise from about 1.8 million tonnes in 1980 to about 2.4 million tonnes by the year 2000.