

Office Memorandum

DATE : September 30, 2006

TO : David Thornton

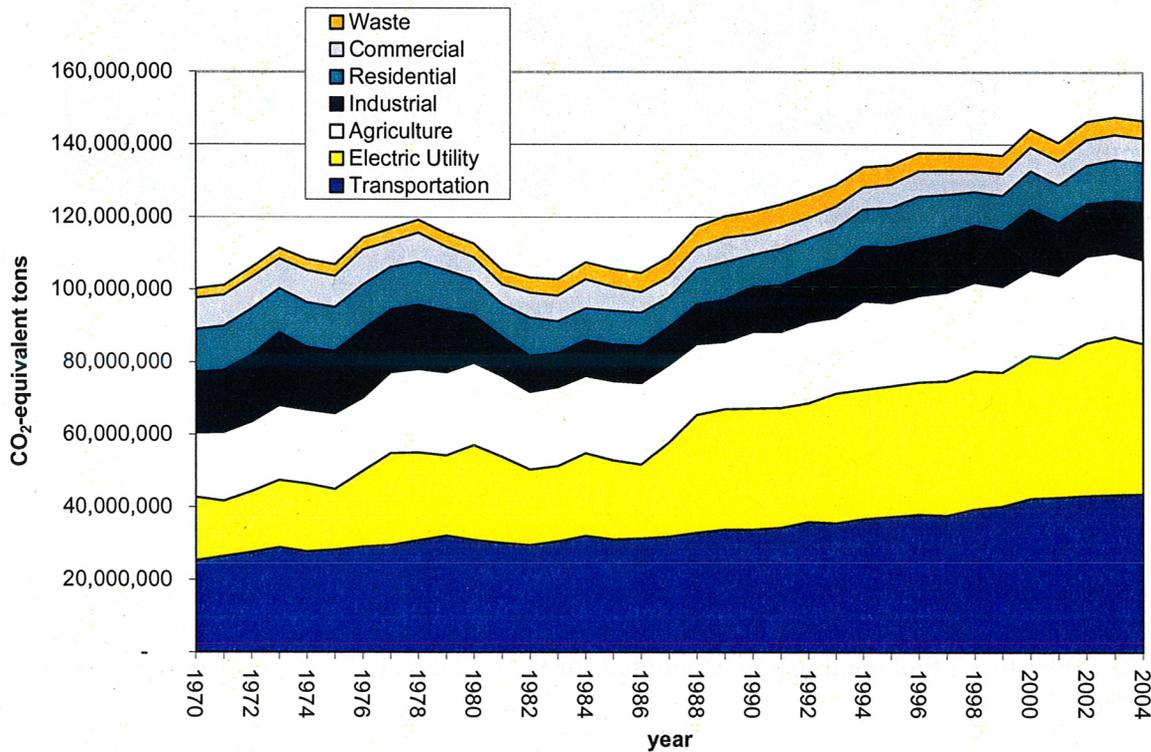
FROM : Peter Ciborowski

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SUBJECT : **Greenhouse Gas Inventory**

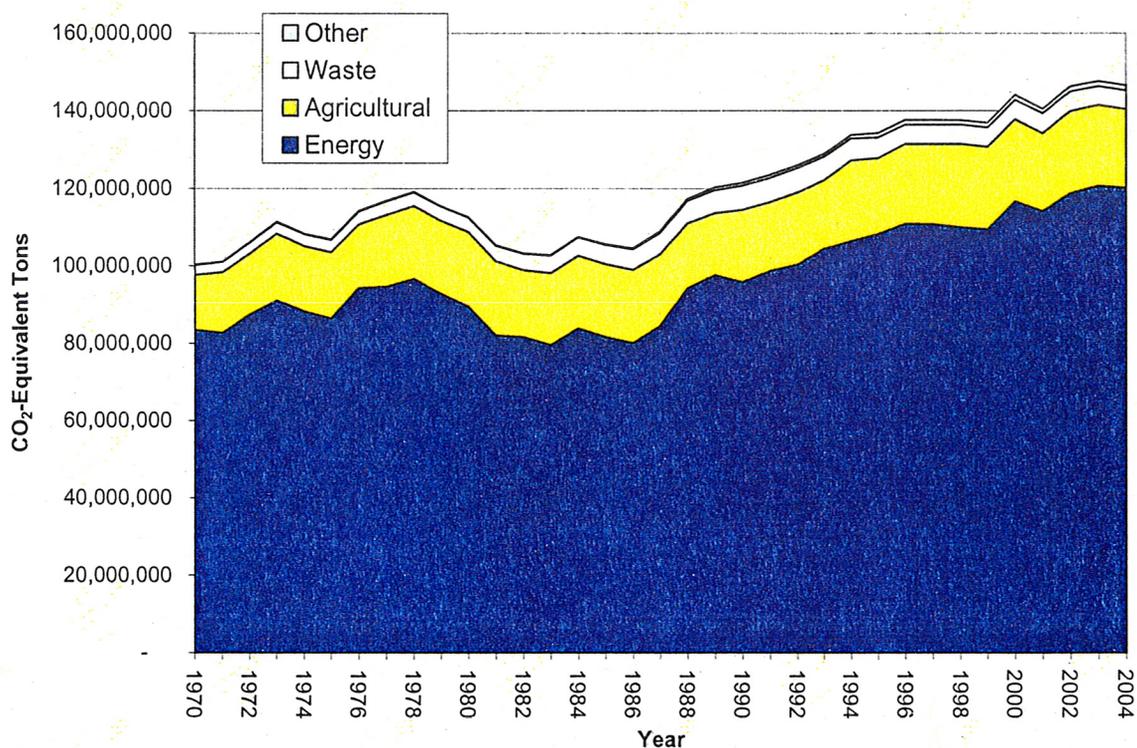
The MPCA produces a state greenhouse gas emission and sink inventory on a biennial basis. The inventory was updated recently for calendar years 2003 and 2004. The trend in emissions is shown in Figure 1 by economic sector. Minnesota greenhouse gas emissions were basically flat between 2002 and 2004, increasing by a few hundred thousand tons. Between 2000 and 2004 emissions increased by 2.3 million tons or about 2%, and from 1990 to 2004 by 25 million tons or 21%. In 2004 Minnesota emitted an estimated 146 million tons of greenhouse gases to the atmosphere. Of this, transportation and electricity generation accounted for about 60% of all GHG emissions from Minnesota.

Figure 1. Greenhouse Gas Emissions from Minnesota, 1970-2004



By major activity, energy production is the principal source of greenhouse gas emissions, accounting for about 80% of all GHG emissions. The trend in GHG emissions by major activity is shown in Figure 2. CO₂ is the most important greenhouse gas emitted to the atmosphere, comprising about 80% of all GHG emissions in the state. The 34-year trend since 1970 in GHG emissions by gas is shown in Figure 3 in CO₂-equivalent tons.

Figure 2, Greenhouse Gas Emissions from Minnesota by Major Activity



The general upward trend in statewide greenhouse gas emissions mirrors the rise in statewide fossil fuel energy use. The 34-year trend in statewide energy use is shown in Figure 4 by fuel type. In 2004, fossil fuel combustion accounted for about 85% of all energy consumption in Minnesota.

Figure 3. Greenhouse Gas Emissions from Minnesota, 1970-2004

