and HFCs would result in an increase in chlorine concentration in the stratosphere of only 0.1 parts per billion (EPA, 1989, p. 3–69). Although there would be a minor increase in chlorine concentration, the CFC replacements in this scenario would decrease global warming by 1% in 2075. Avoiding extensive use of HCFCs with higher ODP, for example HCFC–141b, would preclude significant increases in stratospheric chlorine.

It is important to compare the effectiveness of such policies for CFC replacement. For example, in the EPA's limiting or "worst case" scenario, where "Maximum Use of HCFCs with Maximum Chlorine Content" is considered, the estimated rate of warming would actually increase by 4.3%, indicating the inherent GWP of these substitutes (EPA, 1989, p. 3–59). Comparing this increase to the 1% reduction in GWP that is possible indicates how proper management could make a difference of over 5% in the rate of global warming. In comparison, doubling fuel efficiency of the global automobile fleet would only reduce the global warming effect 7% in 2075 (EPA, 1989, p. 3–59).

Implementing the "Minimize Greenhouse/Energy Impact" scenario is projected to result in a large net global saving in energy costs. Such savings are generated in this scenario with energy consumption being minimized through, for example, the use of ammonia as a refrigerant and energy–efficient vacuum panels instead of conventional foam insulation. The potential global savings in energy costs were estimated by the EPA to total as much as $US 270 billion and could substantially offset the overall costs of reducing the present use of CFCs (EPA, 1989, pp. 3–47, 3–48 and 3–57).

C. Reducing the Use of Other Ozone Depleting Substances

Methyl chloroform and carbon tetrachloride are expected to be the principal sources of chlorine in the stratosphere once CFCs are phased out of production. Their potential contributions to global warming have not been calculated, perhaps because their GWP collectively is relatively low. Considering the recent, unexpected increase in carbon tetrachloride levels from uses that are not yet fully documented, and because of its GWP, there should be more concern about trends in the use of this solvent. There already is concern regarding methyl chloroform because of its ODP. Since alternates exist for both substances, there should not be any reason why policy and regulation cannot eliminate them by 2000. According to the Technology Review Panel, substitutes exist for 90–95% of methyl chloroform uses. Substitutors also exist for most uses of carbon tetrachloride except in their feedstock application for HCFC's. The UNEP working group in a draft report suggests that it is technically feasible to end the production and consumption of carbon tetrachloride by 2000 (UNEP, 1989a, p. 11).