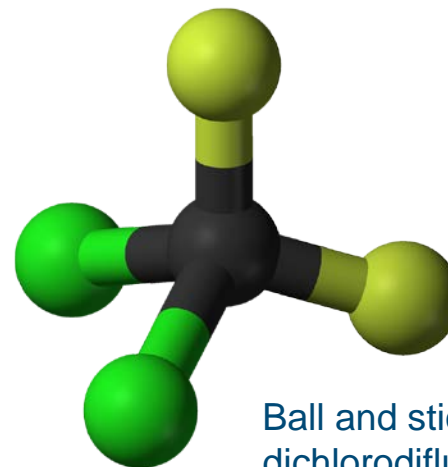


Impact of CFCs on global warming

Read the full article at rsc.li/2vvDo4f

Organic halogen compounds are known to have depleted atmospheric ozone concentrations, contributing to the ozone hole over the Antarctic. A new study has shown the amount these compounds have also contributed towards global warming. Scientists calculated that one third of global warming during the second half of the 20th century was due to heat trapped by halogenated compounds. During this period, they caused almost half of the loss of Arctic sea ice.

Halogenated organic compounds trap much more heat in the atmosphere than most other known compounds. For example dichlorodifluoromethane (CFC-12) has a global warming potential almost 11,000 times that of carbon dioxide. This means that, although CFC's exist in much smaller atmospheric concentrations than other greenhouse gases, their impact can be just as significant.



Ball and stick model of the dichlorodifluoromethane molecule



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- 1. Name three greenhouse gases.**
- 2. Give three effects of global climate change.**
- 3. Explain how greenhouse gases cause the greenhouse effect.**