



## Ozone-Depleting Gas

An international team of researchers has said that the **rogue emissions of a gas (CFC-11) that harms the ozone layer comes from the eastern China.**

- This is in line with what many scientists, environmental groups and policymakers had suspected after an initial study a year ago. They reported new global emissions of the gas, CFC-11, but could only locate the source generally as East Asia.
- Earlier, it was also found that the factories in Shandong (China) still make or use the gas to manufacture foam insulation.

### CFC-11

- CFC-11, also known as **trichlorofluoromethane**, is one of a number of chlorofluorocarbon (CFC) chemicals that were initially developed as refrigerants during the 1930s.
- It took many decades for scientists to discover that when CFCs break down in the atmosphere, they release chlorine atoms that are able to rapidly destroy the ozone layer which protects us from ultraviolet light. Excessive amounts of some types of UV radiation can cause skin cancer and eye damage in people and are harmful to crops and other vegetation.
  - **A gaping hole in the ozone layer over Antarctica was discovered in the mid 1980s.**
- The international community agreed the **Montreal Protocol** (an international pact to preserve the layer of ozone) in 1987 which **outlawed chlorofluorocarbons** for almost all uses.
- Following the ban, global concentrations of CFC-11 declined steadily until about 2012. **Pace of the slowdown dropped by half from 2013 to 2017.**

**One tonne of CFC-11 is equivalent to around 5,000 tonnes of CO<sub>2</sub>**, leading not only to **decline in the ozone layer but also an increase in earth's overall temperature.** China urgently needs to take action against the use of this gas.