

7664 **Glossary**

7665 **Aerosols**

7666 Tiny particles suspended in the air.

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7668 **Anthropogenic**

7669 Human-caused.

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7671 **Catalytic Reaction**

7672 Acceleration (increase in rate) of a chemical reaction by means of a substance, called a

7673 catalyst. Chlorine acts as a catalyst in the destruction of ozone in the stratosphere.

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7675 **Climate forcing**

7676 Changes that affect the energy balance of the planet and that consequently “force” the

7677 climate to change (see also radiative forcing). Examples of climate forcing include

7678 changes in atmospheric carbon dioxide, or suspended particulates (see aerosols), or

7679 energy from the sun.

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7681 **Consumption**

7682 Used here as defined by the Montreal Protocol as the magnitude of ODS Produced +

7683 Imported minus that which is Exported.

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7687 **Greenhouse gases**

7688 Gases including water vapor, carbon dioxide, methane, nitrous oxide, and halocarbons
7689 that trap infrared heat, warming the air near the surface and in the lower levels of the
7690 atmosphere.

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7692 **100-year GWP**

7693 The global warming potential of a chemical integrated over a 100-yr time horizon relative
7694 to CO₂. When applied as a weighting factor to emissions or production of other
7695 chemicals, the resulting quantity provides a CO₂-equivalent emission or production.

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7697 **Ozone Depleting Substance (ODS)**

7698 A chemical containing chlorine or bromine that can be transported to the stratosphere.
7699 This includes CFCs, halons, HCFCs, and a number of chlorinated and brominated
7700 chemicals. Most ODS are regulated by the Montreal Protocol, though some with very
7701 short lifetimes (*e.g.*, CHBr₃) or small anthropogenic sources (*e.g.*, CH₃Cl) are not.

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7703 **Production**

7704 The magnitude of ODS or substitute chemical produced by industry.

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7706 **Radiative Forcing**

7707 Broadly defined as the difference between the incoming radiation energy and the
7708 outgoing radiation energy in the climate system. If more energy is incoming than
7709 outgoing, it tends to warm the climate (and is a planetary energy imbalance). A source of

7710 radiative forcing might be more solar energy, or more greenhouse gases for example.

7711 (This term is used in a more specific manner in IPCC).

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7713 **Stratosphere**

7714 The highly stratified region of the atmosphere above the troposphere extending from

7715 about 10 km (ranging from 9 km in high latitudes to 16 km in the tropics on average) to

7716 about 50 km.

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7718 **Substitutes for Ozone Depleting Substances**

7719 Used in this chapter to refer to halogenated chemicals used in place of CFCs, halons,

7720 CH₃CCl₃, and CCl₄. Specifically this refers to HCFCs, which are also ODSs, and HFCs,

7721 which are not ODSs because they contain no chlorine or bromine.

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7723 **Troposphere**

7724 The lowest part of the atmosphere from the surface to about 10 km in altitude in mid-

7725 latitudes (ranging from 9 km in high latitudes to 16 km in the tropics on average) where

7726 clouds and “weather” phenomena occur, in the troposphere, temperatures generally

7727 decrease with height.

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