

GREENHOUSE EFFECT IS THE RESULT OF

Atmospheric greenhouse gases—carbon dioxide, methane, nitrous oxide, and others—let the sun's radiation through but absorb infrared.

The industrial activities that our modern civilization depends upon have raised atmospheric carbon dioxide levels from parts per million to parts per million in the last years. Adapt to the changing climate which includes things like rising sea level and related flooding. Hurricanes are connected with sea temperature — they only form over waters that have a temperature of at least Energy in, energy out There's a delicate balancing act occurring every day all across the Earth, involving the radiation the planet receives from space and the radiation that's reflected back out to space. The gases that contribute to the greenhouse effect include water vapor, carbon dioxide CO₂, methane, nitrous oxides, and chlorofluorocarbons CFCs. A minor but very important component of the atmosphere, carbon dioxide is released through natural processes such as respiration and volcano eruptions and through human activities such as deforestation, land use changes, and burning fossil fuels. Instead, they have observed a cooling in the upper atmosphere, and a warming at the surface and in the lower parts of the atmosphere. The extra water vapour in the atmosphere will fall again as extra rain, which can cause flooding in other places in the world. Gases in the atmosphere can reflect or trap heat energy, much like what happens in a greenhouse for plants. The consequences of changing the natural atmospheric greenhouse are difficult to predict, but certain effects seem likely: - On average, Earth will become warmer. Migration of species Many animal species will be forced to migrate in order to survive the changes in the main climatic patterns altered by the progressive increase in temperatures. Mitigate the impact of climate change by aggressively enacting policies that actually reduce the concentration of CO₂ in the atmosphere. Solar Irradiance The above graph compares global surface temperature changes red line and the Sun's energy received by the Earth yellow line in watts units of energy per square meter since The Causes of Climate Change A simplified animation of the greenhouse effect. Flooding of islands and coastal cities As stated in the fifth Assessment Report of the Intergovernmental Panel on Climate Change IPCC, , during the period the global average sea level rose 19 centimetres. The most recent meetings of scientists Climate Change Summit, Copenhagen COP15 suggest that the consequences of increase in temperature caused by the greenhouse effect may be more severe than were previously thought. This is what we know as global warming. At the same time, higher temperatures and shifting climate patterns may change the areas where crops grow best and affect the makeup of natural plant communities. Hurricanes will be more devastating The intensification of the greenhouse effect does not cause these extreme climatic events, but it does increase there intensity. Certain gases in the atmosphere block heat from escaping. Because of the low atmospheric pressure, and with little to no methane or water vapor to reinforce the weak greenhouse effect, Mars has a largely frozen surface that shows no evidence of life. In areas that are dependent on meltwater from mountain areas, this can cause drought and lack of domestic water supply. These type of gas molecules are called greenhouse gases," Michael Daley, an associate professor of Environmental Science at Lasell College told Live Science. The Role of Human Activity In its Fifth Assessment Report, the Intergovernmental Panel on Climate Change, a group of 1, independent scientific experts from countries all over the world under the auspices of the United Nations, concluded there's a more than 95 percent probability that human activities over the past 50 years have warmed our planet. Let's find out about the main consequences of this phenomenon: Thawing of glacial masses Glacial retreat also has its own consequences: reduced albedo — the percentage of solar radiation that the earth's surface reflects or returns to the atmosphere —, a global rise in sea level and the release of large methane columns are only some of them, however, they are all dramatic for the planet. Go Highlight 1 The greenhouse effect is a natural phenomenon and is beneficial for us. It is therefore extremely unlikely that the Sun has caused the observed global temperature warming trend over the past half-century. That's because greenhouse gases are trapping heat in the lower atmosphere. When the weather gets warmer, evaporation from both land and sea increases. Since the dawn of the Industrial Revolution in the early s, the burning of fossil fuels like coal, oil and gasoline have greatly increased the concentration of greenhouse gases in the atmosphere, especially CO₂, National Oceanic and Atmospheric Administration NOAA.