

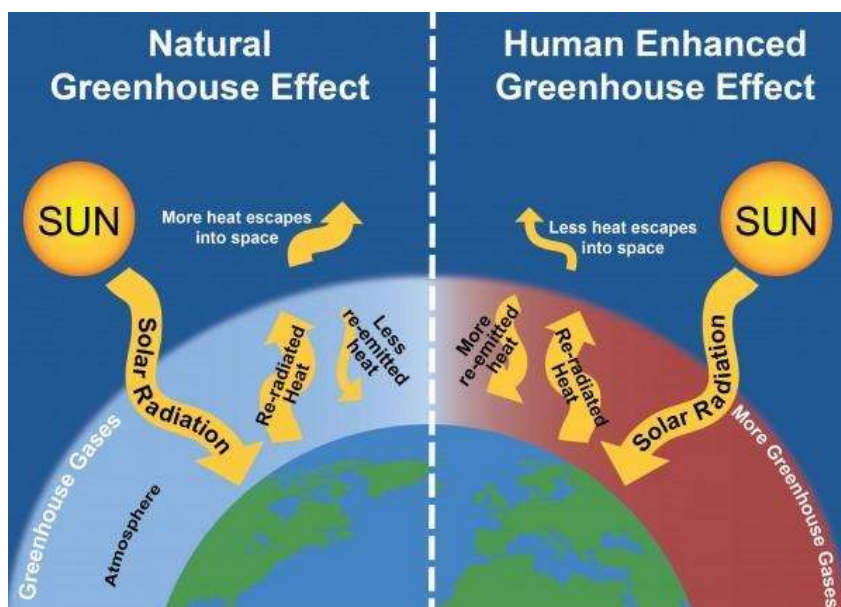
What is Climate Change?

Climate change is the large-scale shift in weather patterns caused by natural and human-induced emissions of greenhouse gases (GHG) to the earth's atmosphere. GHG consists of carbon dioxide, methane, nitrous oxide and fluorinated gases. GHG emissions trap heat in the atmosphere, warming the planet. Over the last 150 years the global temperature has risen approximately 2°F. Human activities are responsible for almost all (95%) of the increase in greenhouse gases in the atmosphere in the 20th century. Climate change is all too real and we are now experiencing its negative impacts.

Climate change is bringing increasing extreme weather patterns – deadly heat waves, extreme fire conditions, extreme hurricanes and storms with property damage from wind, ice, lightning and flooding. Scientists are surprised how quickly the impacts of global warming are accelerating. Another rise of ~2° F is expected by 2100. During that period of time possibly as much as 75% of the world population may be threatened by deadly heat waves and other global impacts.

America needs to act now. Twenty-five percent of greenhouse gases such as carbon dioxide or methane that are globally released to the atmosphere are from American sources.

The graphic which follows contrasts the natural greenhouse effect with the human enhanced greenhouse effect.



Source: UofM Center for Sustainable Systems