



I'm not robot



I am not robot!

But in the context of rapid change, and real-world consequences, Climate change is a real and urgent challenge that is already affecting people and the environment worldwide. Fossil fuels – coal, oil and gas – are by far the largest contributor to global climate change, accounting for over 90 per cent of global greenhouse gas emissions. Other climate perturbations are more subtle and their effects on weather less obvious. Our planet has already warmed by an average of 1°C in the last century and is warming faster now. Climate change is altering temperature, precipitation, and sea levels, and will adversely impact human and natural systems, including water resources, human settlements and health, ecosystems, and biodiversity. The IPCC Fourth Assessment Report (AR4) Climate Change comprises contributions from the three working groups on 1) the physical science, 2) climate change impacts, and 3) adaptation, mitigation, and vulnerability. Enormous progress has been made in increasing our understanding of climate change and its causes, and a clearer picture of current and future impacts is emerging. Habitats are undergoing rapid shifts in response to changing temperatures and precipitation patterns. • Climate Change Today: what changes have already occurred and how we know humans are responsible; Our Future Climate: what changes could happen in the future depending on the actions we take; Limiting Future Climate Change: what is required to stop global temperature from continuing to rise. The natural and human causes of climate change were examined, including the earth's orbital changes, solar variations, ocean currents, volcanic eruptions, and so on. In this book, background information on climate change and why adaptation is needed in developing countries is provided in chapter II. The chapter also explains how the UNFCCC, which provides the basis for international action on climate change, is helping adaptation efforts in developing countries. What causes climate change? Climate change (sometimes called global warming) is the process of our planet heating up. Significant changes are occurring on Earth, including increasing air and ocean temperatures, widespread melting of snow and ice, and rising sea levels. The unprecedented acceleration of climate change over the last century is due to increases in heat-retaining gases called greenhouse gases, the best known of which is carbon dioxide. Fossil fuels – coal, oil and gas – are by far the largest contributor to global climate change, accounting for over 90 per cent of global greenhouse gas emissions and nearly 80 per cent of increases in heat-retaining gases. From a scientific standpoint, the causes of current ongoing climate change are well established. Research is showing that there is strong evidence that the warming of the Earth over the last half-century has been caused largely by human activity, such as the burning of fossil fuels and changes in land use. Causes and Effects of Climate Change. This fact sheet discusses key scientific findings and the impacts of climate change on people and nature are increasingly apparent. Unprecedented flooding, heat waves, and wildfires have cost billions in damages. The atmosphere is heated up when increased concentrations of greenhouse gases capture some of the sun's energy that is otherwise reflected back into space. Climate Change: Science and Impacts. The Earth's Climate. Climate change is altering temperature, precipitation, and sea levels, and will adversely impact human and natural systems, including water resources, human settlements and health, ecosystems, and biodiversity.