

# Climate Change: Causes and Consequences

## Outline

### 1. Introduction

Attention Grabber: Barack Obama's quote stressing the significance and urgency of climate change

General Statement: The reality of climate change as a current, rather than future issue

Thesis Statement: Causes and Consequences of 'climate change' and how to mitigate and adapt to the issue

### 2. Causes of Climate Change

#### 2.1 Natural Causes

2.1.1 Changes in Sun's energy

2.1.2 Changes in reflectivity of Earth's atmosphere and surface

2.1.3 Volcanism leading to emissions

2.1.4 Plate tectonics leading to reconfiguration of oceans

2.1.5 Greenhouse effect heating the atmosphere and surface

#### 2.2 Anthropogenic Causes

2.2.1 Humanity adding to the Greenhouse effect by emitting greenhouse gases

2.2.2 Sources of Greenhouse gases

2.2.2.1 Burning of fossil fuels

2.2.2.2 Deforestation

2.2.2.3 Industrial processes

2.2.2.4 Agriculture

2.2.2.5 Municipal Solid Waste

### 3. Consequences of Climate Change

3.1 Temp Rise in global temperatures

3.2 Extreme weather events

3.3 Rise in sea levels

3.4 Ocean Acidification

3.5 Glacial Retreat and loss of water resources

3.6 Loss of biodiversity

3.7 Detriments to human health risks

3.8 Economic losses

3.9 Displacement of humans

### 4. Strategies that can help mitigate climate change

4.1 Transitioning to Renewable energy to limit combustion of fossil fuels

4.2 Increasing efficiency of infrastructure, transport, and industries to reduce emissions

4.3 Carbon pricing to disincentivize emissions

4.4 Adopting sustainable agriculture practices to reduce emissions and conserve resources

4.5. Converting back forests to reduce CO<sub>2</sub>

4.6 Developing climate resilient infrastructure to resist disasters

4.7 Raising public awareness to promote sustainable practices

4.8 Adherence and compliance to global agreements on combating climate change.

### 5. Conclusion



# Climate Change: Causes and Consequences

## 1. Introduction

Former United States' president, Mr. Barack Obama famously said "No challenge poses a greater threat to future generations than climate change," stressing the significance and urgency of climate change. The future ~~is~~ referred to by the president has arrived, with climate change wreaking havoc across the globe. The United Nations Framework Convention on Climate Change (UNFCCC) describes climate change as a naturally occurring phenomenon exacerbated by human activity. The phenomenon is caused by natural and anthropogenic factors, including; changes in Sun's energy, earth's reflectivity, volcanism, movement of tectonic plates, greenhouse gases, and human activity adding to the greenhouse effect. While climate change is an environmental problem, it has far reaching consequences on global temperature, extreme weather, rise in sea levels, ocean acidification, glacial retreat and freshwater availability, biodiversity loss, human health concerns, economic losses, and human displacement. As the world gears up to ~~go~~ combat climate change, it is important to understand the underlying causes <sup>and impact,</sup> and explore strategies to mitigate the impacts and adapt to climate change. This essay will delve into the causes of climate change and examine the profound consequences it has on the world. The essay will also provide layered recommendations to address climate change.