

# Climate Change: Just how bad is it?

Alexa Zylstra  
Nashville Software School  
23 January 2021

# Focus

01

## CAUSE

What is contributing to climate change?

02

## EFFECT

How are these changes affecting human life?

03

## ACTION

What are countries doing to mitigate climate change?

# CAUSE: CO2 EMISSIONS

CO2 emissions adversely affect humans by:

- Poor air quality due to too much CO2 in the air
- Is one of the main gases causing the 'greenhouse effect' which raises the globe's average temperature
- Increases acidity of both ocean and freshwater sources

The main source of CO2 emissions are from the burning of fossil fuels, which are carbon containing compounds.



# CAUSE: DEFORESTATION

Deforestation causes:

- Loss of endemic, or native, plant and animal species
- Disruption to small scale farming and agriculture
- Removes a natural and cheap way to remove CO2 emissions from the air
- Increase in ground temperature

Deforestation largely affects those who rely on their country's land and specific ecosystem for livelihood..



# 1.3 Million

Square kilometers of forest removed from 1990-2016

# EFFECT: **TEMPERATURE RISING**

## **AGRICULTURE DISRUPTION**

Farmers are seeing longer growth seasons and shorter frost seasons. While this may initially seem like a good thing, the frost season is an important time for returning moisture and nutrients to the soil.

## **INCREASED NATURAL DISASTERS**

Destabilized weather conditions causes an increase in natural disasters such as tropical storms, fires, severe winter conditions, and flooding.

# EFFECT: SEA LEVELS RISING

## DRINKABLE WATER

Sea levels rising poses a large problem for those who live in coastal or island areas. With the rise of saltwater, groundwater and other potable water sources begin to mix with sea water posing an issue for people relying on those water sources.

## INCREASED FLOODING

Higher sea levels has caused an increase in floods affecting lower lying areas as well as many islands. It has also shortened coastlines affecting people who have homes built near the water.

# ACTION

---

Don't worry, this entire presentation isn't all bad news.



# SWITCH FROM FOSSIL FUELS TO RENEWABLE ENERGY

---

Switching to more renewable sources such as nuclear, hydro, solar, wind, and thermal energy would reduce emissions and increase the longevity of energy sources.

# REFORESTATION:

**2.2 billion acres**

is how many trees would need to be planted

**250 billion metric tons**

is how much carbon would be removed from the atmosphere

## THE PARIS AGREEMENT:

A legally binding international agreement to mitigate climate change requiring economic and social transformation. The goal? To limit global temperature rise to 2°C.

# WHAT DO I NEED THE SHINY APP FOR?

## DATA SOURCES


With linked data sources on each page, the app allows for easily visualization with a direct link to the data source.

## EXPLORATION

See the numbers and decide for yourself the issues that were mentioned here. There's also further reading provided.

## EDUCATION

Learn more about climate change and the efforts going in to mitigate it as well as how you can make a difference.



**LET'S SEE  
SOME DATA**

## CREDITS

This is where you give credit to the ones who are part of this project.  
Did you like the resources on this template? Get them for free at our other websites.

- ◀ [Paris Agreement](#)
- ◀ [NASA paper on reforestation efforts](#)
- ◀ [Science mag article modeling reforestation](#)
- ◀ [CO2 level dangers, Wisconsin Dept of Health](#)
- ◀ [Che-project, main sources of CO2 emissions](#)
- ◀ [EPA on increased ocean acidity](#)
- ◀ [Importance of endemic species, Britannica](#)
- ◀ [Deforestation increasing temperatures](#)
- ◀ [Increasing temperatures affecting agriculture, USDA](#)
- ◀ [EPA climate change impacting water sources](#)
- ◀ [Renewable energy benefits, EPA](#)

# THANKS!

---

Have any questions or want to connect?

[zylstra.az@gmail.com](mailto:zylstra.az@gmail.com)

[LinkedIn](#)

[Github](#)