

Environmental Corporate Social Responsibility

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## Why does is matter?

Corporate Social Responsibility (CSR) plays an important part private company cultures.

With the world's attention increasingly turning towards the important, **global** issue of climate change, businesses cannot afford to turn a blind eye.

**Therefore**, it is becoming increasingly crucial for the success of private companies to incorporate environmental and social responsibility and ethical practices into the business practices and culture.

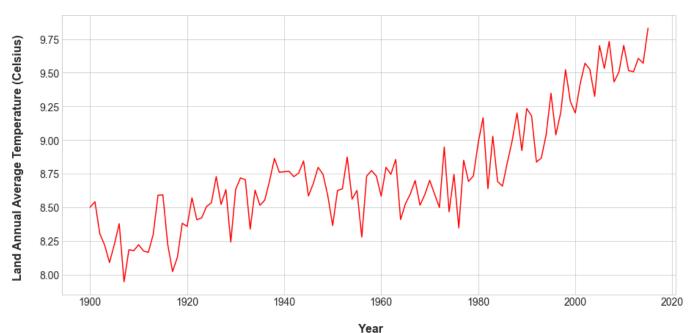




### A Global Phenomenon

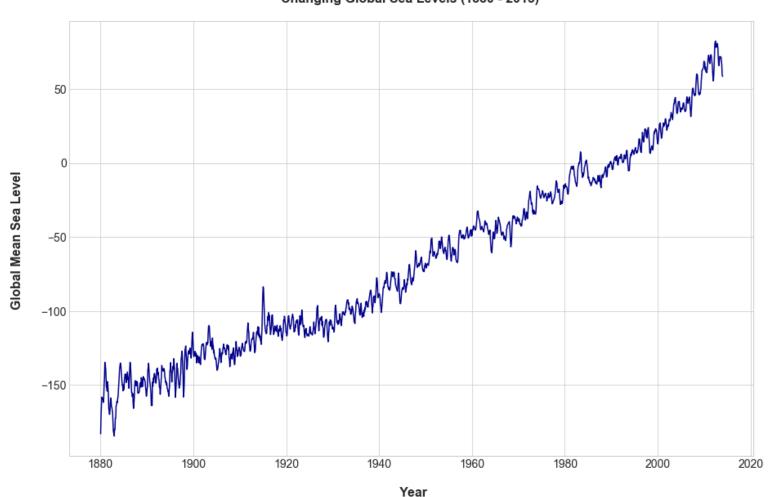
- o Temperatures are rising in the United States and all over the world.
- As a result, glaciers are melting, the ocean is warming up and sea levels are rising.
- Occurrences of extreme weather, such as storms, wildfires, heavy rainfall, droughts,
  etc. are increasing in frequency and material damages.

### **Average Annual Global Temperatures**

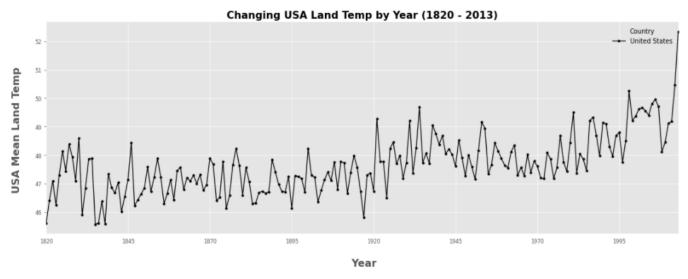


## Rising Sea Levels

#### Changing Global Sea Levels (1880 - 2013)



## Looking at temperatures in the United States

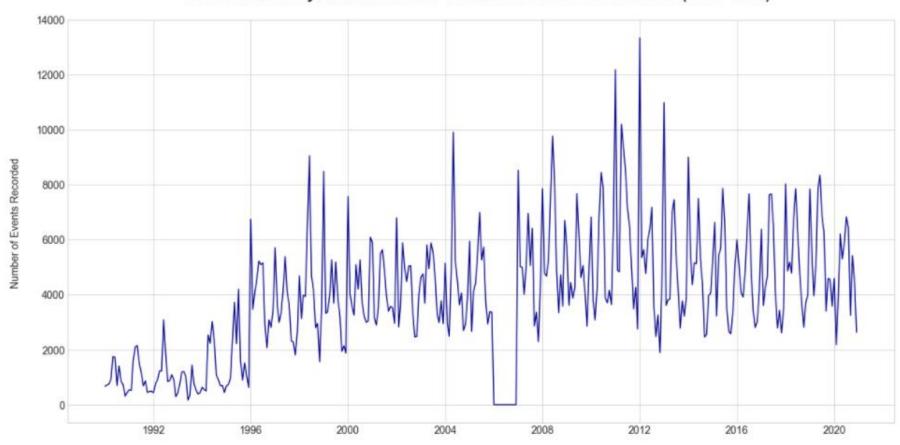




Year

# Extreme Weather: Is it still a freak storm if it occurs more often?

#### Recorded Monthly Extreme Weather Occurrences in the United States (1990 - 2020)

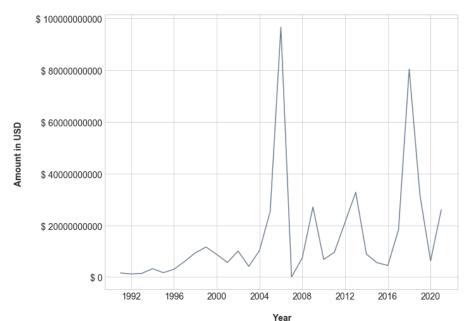


# Damages are increasing: are you willing to bear the cost?

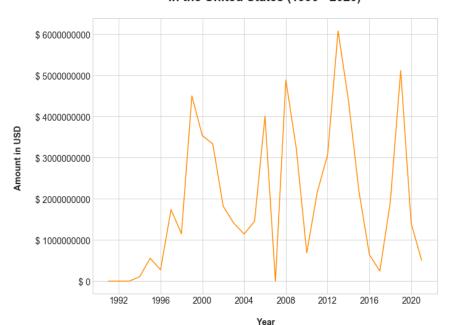
"Taken as a whole, the range of published evidence indicates that the net damage costs of climate change are likely to be significant and to increase over time."

- Intergovernmental Panel on Climate Change

### Recorded Annual Property Damages of Extreme Weather Events in the United States (1990 - 2020)



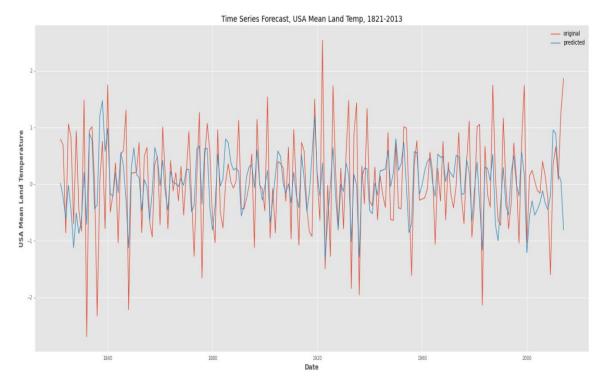
### Recorded Annual Crop Damages from Extreme Weather Events in the United States (1990 - 2020)



## Model Projections

We used Auto Regressive Integrated Moving Average (ARIMA) to build several models relating to climate change variables, including:

- Greenhouse GasEmissions
- Average Land
  Temperature (Global and United States)
- Sea Level Change
- Extreme Weather EventOccurrences



## Heavily Impacted Industries

Energy

Insurance

Agriculture

Commercial Fishing

Automobile



## Protect the Environment to Protect Your Profits



#### A Few Recommendations for a Successful ECSR:

- Conduct periodic environmental assessments to review the firm's impact and commit to reducing the firm's overall carbon footprint.
- Enact corporate policies that benefit the environment to institutionalize a socially responsible corporate culture.
- Increase engagement and investments in socially and environmentally conscious funds and initiatives.

# Join the Many Companies Who Are Doing It Right

# Google























### Future Research

- o Dive into the specific types of weather events recorded in the STORMS database used, to geographically break down which specific events affect which States in the US, in order to generate more location-specific recommendations on action points (e.g.corporate infrastructure, insurance policies).
- Gather additional data on greenhouse gas emissions to build a more accurate model, in order to better examine the growth and impact of GHGs on the environment.



THERE IS NO PLANET B



Thank You for Your Time!