How Can We Reduce the Rising Temperatures? New Mexico Supercomputing Challenge Final report

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"How can we reduce the rising temperatures?" YWIC165

Young Women in Computing

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Executive summary :

Global warming is the main cause to temperatures rising because of many different things

1. Sea level rising:

This is a big problem caused by global warming. The polar ice caps are melting due to the rising temperatures causing the sea levels to rise. What happens if the sea levels rise? The coastal cities and communities near the oceans will become part of the ocean. The sea levels will completely sink the entire Atlantic seaboard, as well as New York, Philadelphia, D.C., Norfolk, The entirety of Florida, New Orleans, and so many others will be sunk.

2. CO^2 Levels in the atmosphere:

This is a major contributor to Global Temperatures on the rise. Due to the Greenhouse Effect, the heat from the sun enters the atmosphere and some of it gets trapped, getting absorbed by the molecules and reemitted back into the atmosphere. This is usually a good thing, but the amount of Greenhouse Gas is on the rise, carrying the global temperatures.

3. Wildlife affected by the temperatures:

Wildlife, especially animals who thrive and live in colder climate. The populations of animals have been seeing a decline due to the destruction of their homes and creating an unsuitable environment. In turn, species of animals that thrive in warmer climates are starting to migrate north or to colder climates.. Invasive species can also thrive causing a number of other problems for us, the environment, and the ecosystem.

These are several reasons why Global Warming is the main reason why global temperatures are rising.

Problem definition :

Rising temperatures are a growing problem that we need to prevent and reduce as much as possible. We have a solution so it can cut down on fossil fuels so we can stop the temperatures from rising. In our project we want to show the results of rising temperatures so we can alert and spread the word. So one day we can find a solution to stop global warming . We want to inform people about the rising temperatures because no matter what we do it is still

a problem and we need to fix it soon as possible think positive.

Are purpose is to tell people that global temperatures rising is a real scary problem and if we don't do something we can make it even more of a problem to the point that we ran out of fossil fuels and we can't solve the problem because its too big so we need to tell people about this so we can't make the problem worse.

We want people to know about global warming because this is the main reason of global temperatures rising but if people don't know the risks they will just make it worse without knowing so that is why we want people to know about global warming and temperatures rising We want to inform people about the rising temperatures because no matter what you think, It's real, and it's a big problem. We need more people to know about this, what it can do in the long run, and how we can reduce the effects of Global Warming.

We also want to show solutions to global temperatures not to scare people. We want people to know all this information, how the temperatures are going to steadily rise over the centuries, and provide solutions, possible answers, show people what you can do to help reduce the temperature.

Problem solution :

We have a solution to try and slow down the rising temperatures. We can use more eco-friendly energy sources, such as wind, solar, geothermal, hydroelectric, and biomass. If we use these sources we can cut down on fossil fuels the CO² levels will drop and will help stop the temperatures from rising and then try to find a more effective solution to stop the temperatures from rising. It won't be easy though, and we'll need everyone to help out. That is why we made this program, so we can inform people about the consequences of Global Warming, what it'll do to the environment, and now we're telling them how to help. We gathered most of our information from NCDC NOAA website along with the "Climate Change: Vital Signs of the Planet" site from NASA.

"Global Surface Temperature | NASA Global Climate Change." NASA, NASA, 1 Feb. 2018, climate.nasa.gov/vital-signs/global-temperature/.

"Quick Links." National Climatic Data Center, <u>www.ncdc.noaa.gov/data-access/quick-links</u>

Coding project :

The program that we had used was the modeling environment "Netlogo". We created a program to simulate the long term effects of Global Warming.

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Conclusions :

In conclusions global warming is a real and a big deal and we need as much help as possible so the world can be a better place for generations to come.