

What is happening to our common home?

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Our common home

"... to hear both the cry of the earth and the cry of the poor."

Laudato Si'

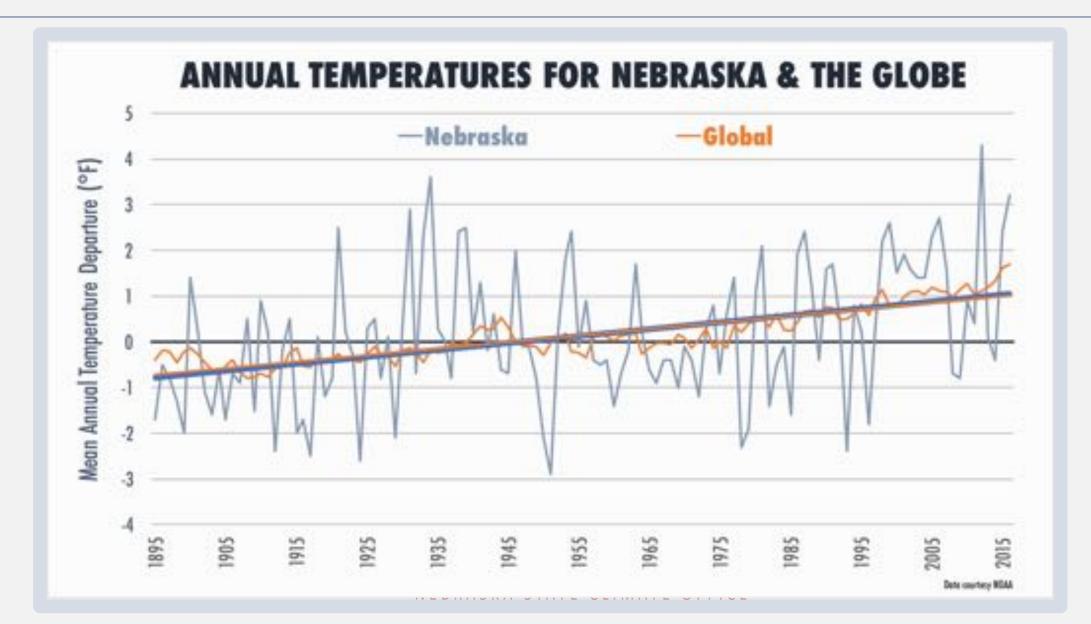


Our common home

The climate is a system (land, water, air, ice/snow, people) and it is complex.



Variability and change happen together



Our environment is changing

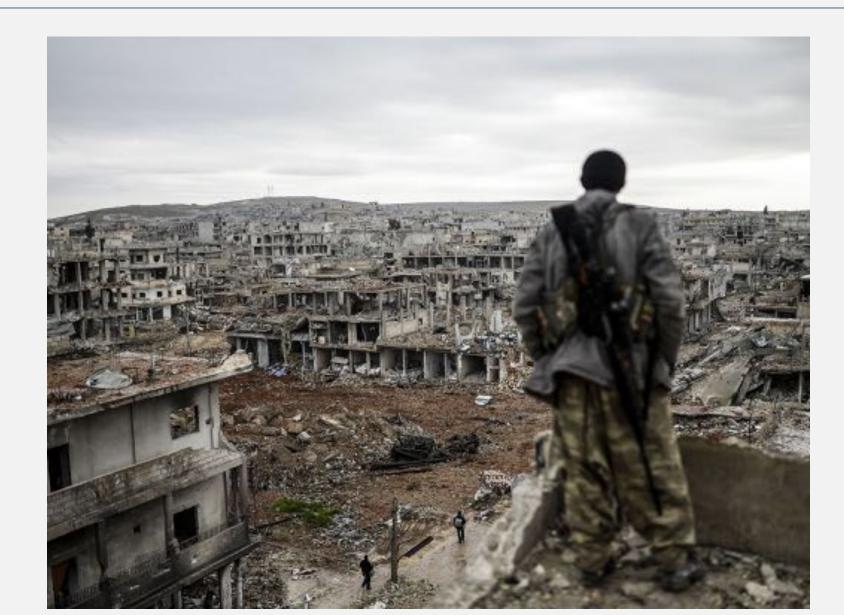


Our climate history



NEBRASKA STATE CLIMATE OFFICE

Climate change and mass migration



Conflict in Syria spurred by drought and lack of food.

Climate change and erosion

Coastal erosion impacting western Alaska.



Climate and extreme events

Nebraska significantly impacted by spring flooding.





Our atmosphere

Enhancement of the greenhouse effect is not a good thing.



Our atmosphere

On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground

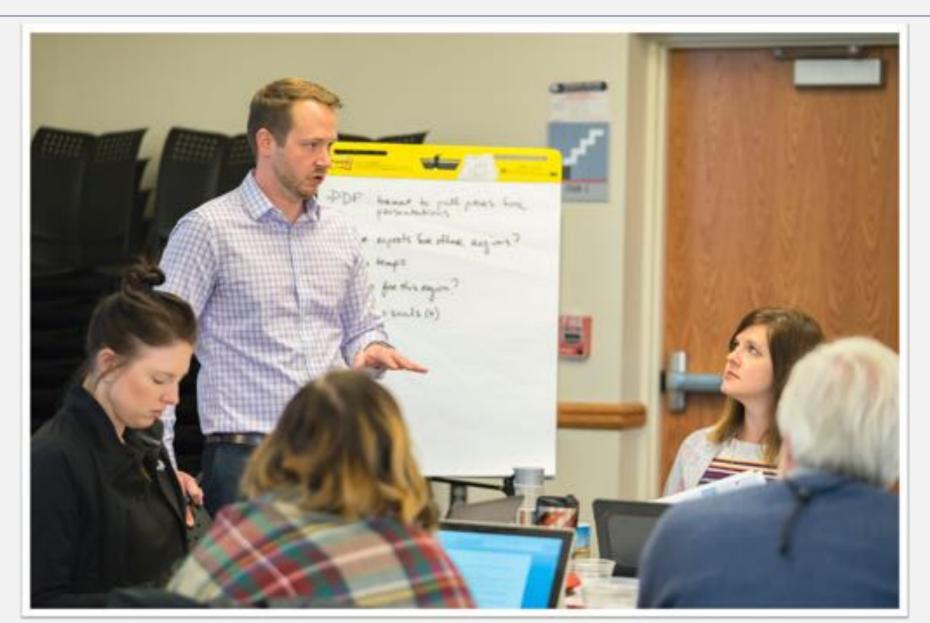
Svante Arrhenius

Philosophical Magazine and Journal of Science Series 5, Volume 41, April 1896, pages 237-276.

Scientists agree

Only 1 out of a hundred scientists rejects the consensus on human-caused global warming. <u>* * * * * * * * * * * * * * * * * *</u> <u>* * * * * * * * * * * * * * * * * * *</u> <u>* * * * * * * * * * * *</u>

Communication is key



Preparedness reduces risk



Why I have hope

Youth

You are never too small to make a difference.



Greta Thunberg, 15 Swedish climate activist.



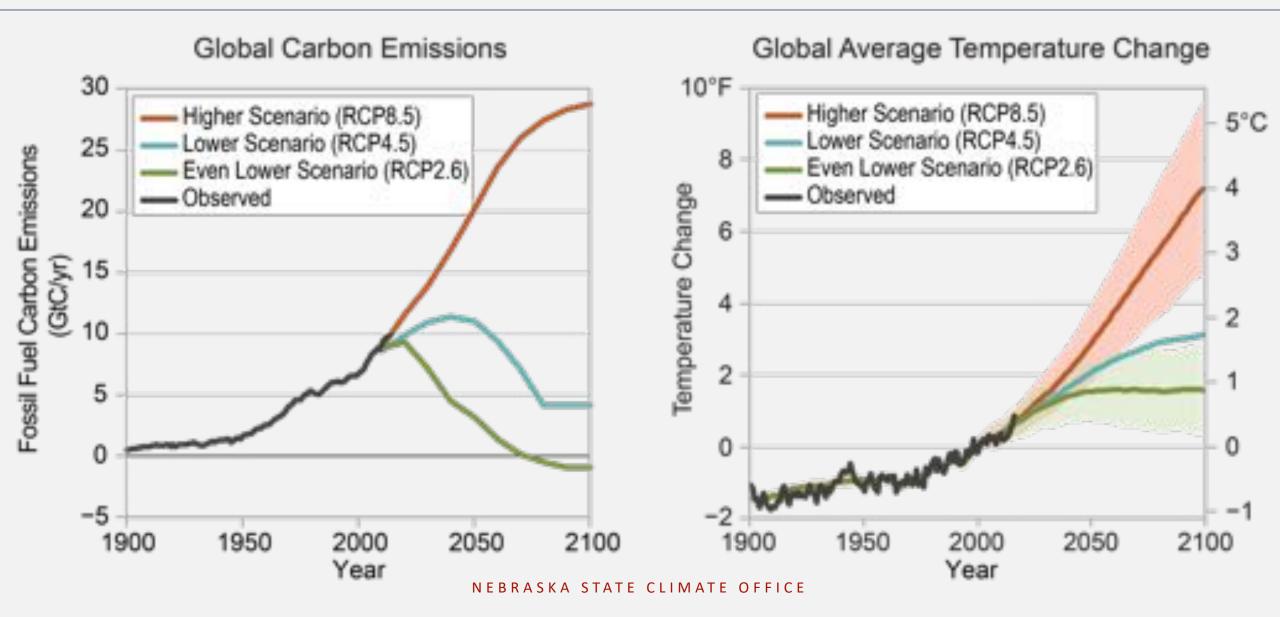
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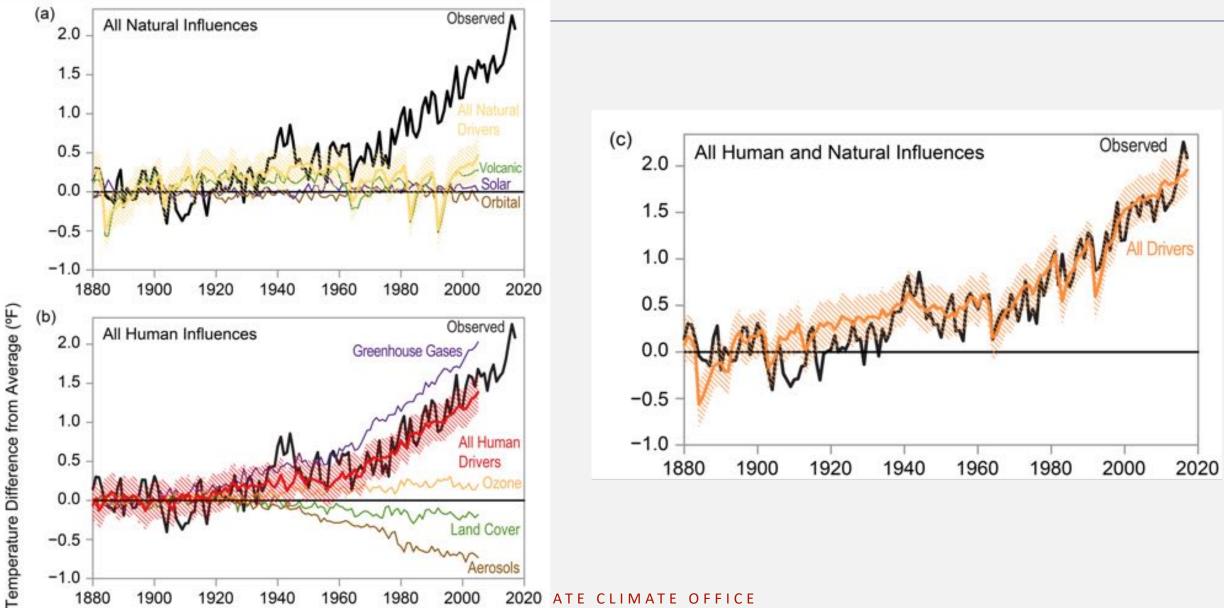
The Speaker



Solutions

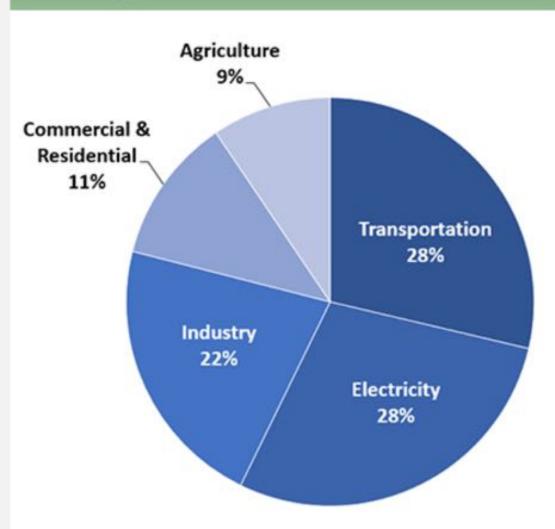


Natural vs. Anthropogenic



Greenhouse Gasses

Total U.S. Greenhouse Gas Emissions by Economic Sector in 2016



Climate Change 101

- The climate system (land, water, air, ice/snow, people) is complex.
- We need the greenhouse effect. What we don't need is an enhancement of it.
- Thanks to math and physics, we can **model** the climate system.
- Humans have a **significant influence** on our climate.
- Temperatures will increase. Wet areas will get wetter. Dry areas will get drier. Extremes will be more prevalent.

Climate Change 101

- The people least able to adapt to climate change will be impacted the most.
- The **sooner** we **act**, the **less risky** it is.
- There is a **disconnect** between the **science** and **public perception** of climate change.
- **Dialogue is key**. Knowing how to **frame the issue** is even more important.
- We are the problem. We are also the solution.
- There is **hope**.