## America's Changing Global Role \*Climate change-Case Study

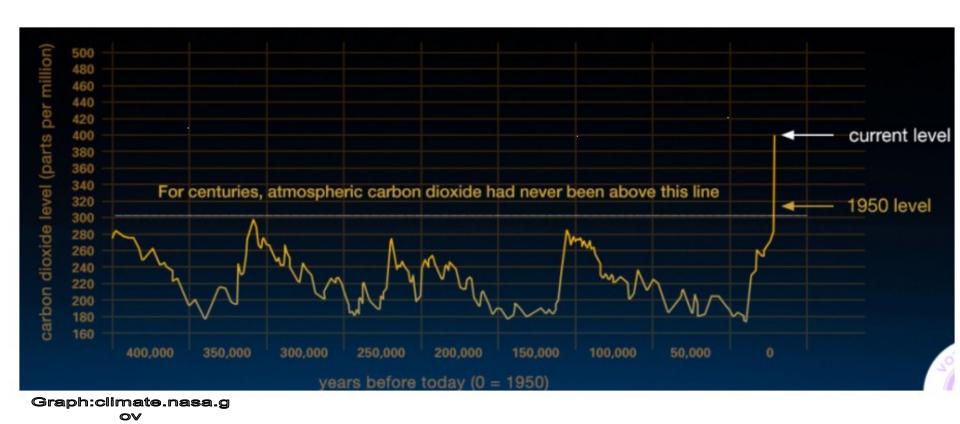


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# Climate change: How do we know?



## 1.The Rise of Atmospheric Carbon Dioxide



\*Atmospheric CO2 has increased since the Industrial Revolution

### 2.Global temperature rise

- Average surface temperature has risen about 1.1 degrees Celsius since the late 19th century
- A change caused largely by increased carbon dioxide and other human-made emissions into the atmosphere.
- Most of the warming occurred in the past 35 years

### 3. Shrinking ice sheets

- Greenland lost 150 to 250 cubic kilometers of ice per year between 2002-2006
- Antarctica lost about 152 cubic kilometers of ice between 2002-2005.

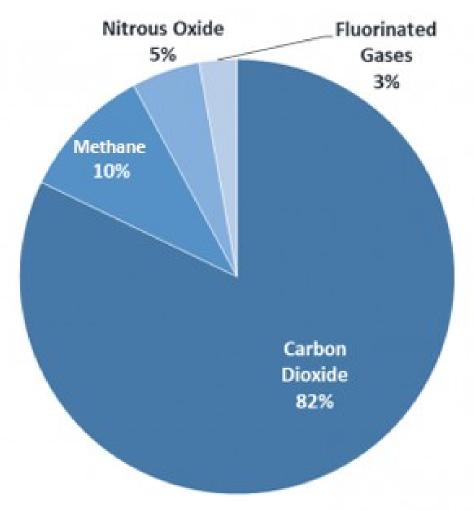


#### +We know because of:

- Warming Oceans
- Glacial retreat
- Decreased snow cover
- Sea level rise
- Declining Arctic sea ice
- Extreme events
- Ocean acidification



#### U.S. Greenhouse Gas Emissions in 2015





"Larger emissions of greenhouse gases lead to higher concentrations in the atmosphere."

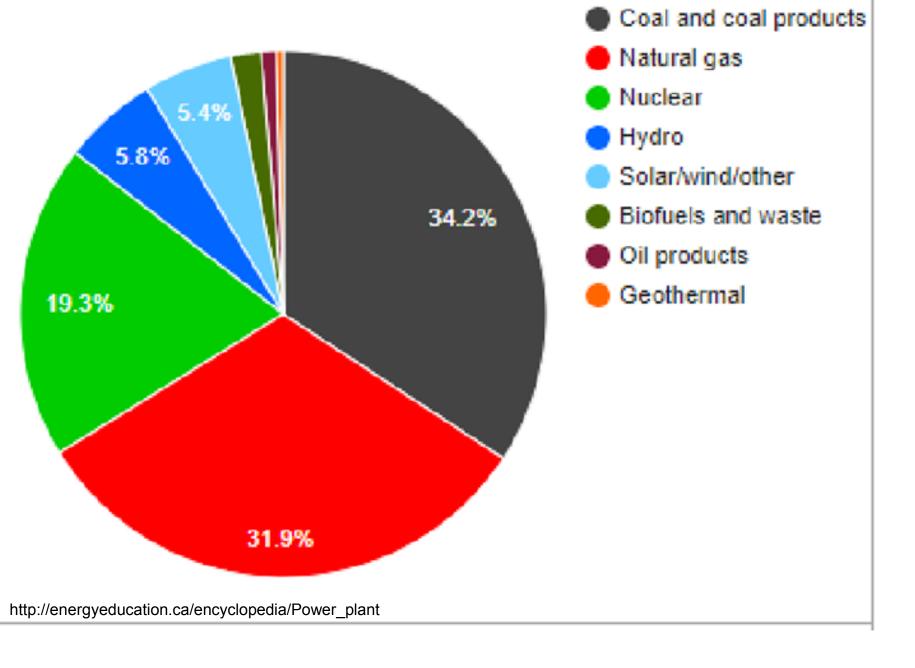
## Fossil fuel/Coal power-plants

 Produces large amounts of different pollutants which reduces air quality and contributes to climate change

 Require enormous amounts of coal

 The largest producers of electricity around the world





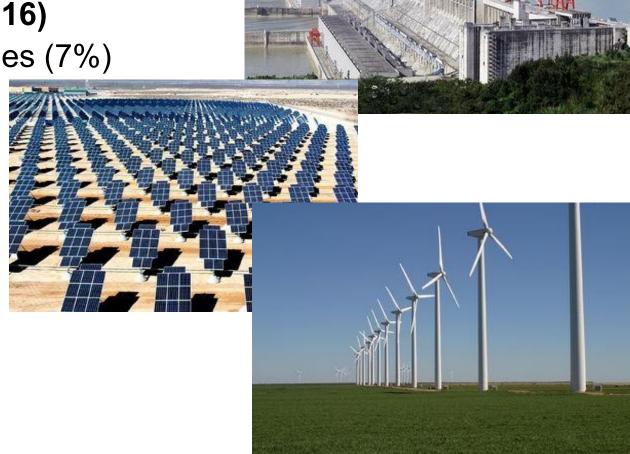
\*2015, U.S. electricity is generated using fossil fuels- Coal 34,2%

Green energy/Renewable energy power plants

 Renewable energy sources provide less than 17% of U.S. electricity (2016)

Hydroelectric facilities (7%)

- Wind turbines(6%)
- Solar panels (1%)
- Biomass(2%)
- Geothermal power (less than1%)





- The United Nations Framework Convention on Climate Change agreement
- Goal- reduction of greenhouse gas emissions
- Starting in the year 2020
- Each country plans and determines its own contribution that it should make in order to reduce/slow down global warming
- Includes NO force mechanism
- President Donald Trump decided to withdraw the United States from the agreement

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# Climate change and other phenomena I

Securitisation of climate change

Environmental security (Buzan and Copenhagen school)

Apocalyptic visions(?)

- interconnection(?)

Environmental degradation

Economic decline & migration

Resource scarcity (not just water)

Global Temperatures

Average global temperatures rise as a result of human carbon emissions



Resources

This causes scarcity in some key resources especially water and viable agricultural land Conflict

Disputes over land, water and other resources lead to armed violence

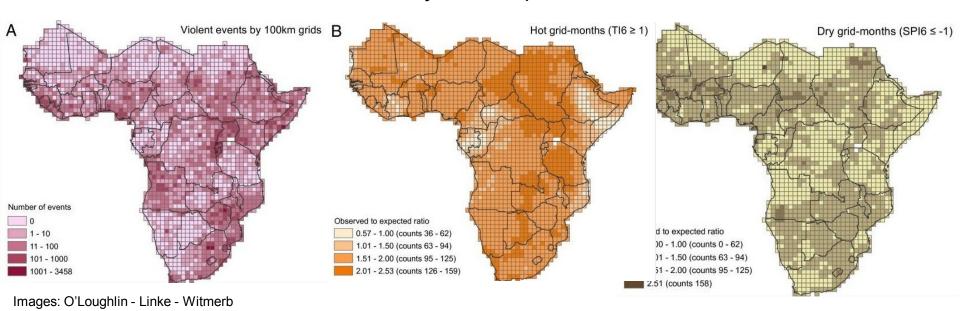
Weak & failing/failed states (esp. Africa, Near East)

Armed conflicts (esp. civil wars & spillover)

# Climate change and other phenomena II

- New (indirect) source of instability and/or conflict
- Correlation, or (suggested) causality?

23% of armed conflicts in ethnically divided places were linked to climate disasters



## Climate change and other phenomena III

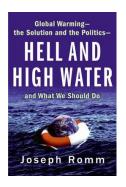
- Lack of reliable data, evidence, and consensus
- Elusive connection, not yet truly proven

Keep watching, studying, and proving...

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## George W. Bush



https://www.goodreads.com/b ook/show/175796.Hell\_and\_ High\_Water

- •In March 2001, the Bush Administration announced that it would not implement the Kyoto Protocol
- •In February 2002, Bush announced his alternative to the Kyoto Protocol, by bringing forth a plan to reduce the intensity of greenhouse gasses by 18 percent over 10 years.
- •Bush's **do-nothing policy** on global warming began almost as soon as he took office. By pursuing a carefully orchestrated policy of delay, the White House blocked even the most modest reforms and replaced them with token investments in futuristic solutions like hydrogen cars.

"They have a single-minded determination to do nothing—while making it look like they are doing something."

Political pressure on scientists

#### Barack Obama



"But for the sake of our children and our future, we must do more to combat climate change."

— President Barack Obama, State of the Union, Feb. 12. 2013

- New Energy for America
- the White House Office of Energy and Climate Change Policy

www.solarsunwerx.com.au

- Obama administration added climate to list of threats to US interests
- •The Clean Power Plan

"The time for denial, delay and dispute is over.... We can only meet the climate challenge with a response that is genuinely global. We will need to engage in vigorous, dramatic diplomacy.,

if the international community would not act swiftly to deal with climate change that "we risk consigning future generations to an irreversible catastrophe...The security and stability of each nation and all peoples—our prosperity, our health, and our safety—are in jeopardy, and the time we have to reverse this tide is running out.,,

•transition from oil to alternative sources of energy military security>envinronmental security 28x

### **Donald Trump**



- •D. Trump drops climate change from US national security strategy
- "Climate change is not identified as a national security threat but climate and the importance of the environment and environmental stewardship are discussed." (James Mattis)
- •2016 withdrawing the U.S. from the Paris agreement:

"I was elected to represent the citizens of Pittsburgh, not Paris"

- •cutting about 31% of the EPA as a result of budget decreases.
- People's Climate Movement, March 2017

#### Literature

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- •https://www.theguardian.com/environment/climate-consensus-97-per-cent/2018/feb/01/its-not-okay-how-clueless-donald-trump-is-about-climate-change
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### Dangers of climate change

- Direct impact on agricultural production
- Direct impact on sea levels
- Some places will become uninhabitable
- Huge waves of migration
- Problem even for the richest states
- Choices made today are very important

#### What should the US do?

- Institution, projects, think-tanks (American Security Project, The Center for Climate and Security)
- Should be priority of NSS again
- Global and long-term threats will require collective action
- Fun fact: 2009 Trump supported action on climate change

## Important role of the US army?

- Lieven (2017): the US army is the only force that can beat climate change
- Militaries have the capacity to mobilize resources on the scale required
- They can make link between the threat of climate change and patriotic duty to convince "ordinary people"

## Important role of the US army?

- Climate change as a topic divides the US society
- The one American institution that retains the confidence and respect of the great majority of Americans from both political parties
- Also, the US Army is currently the world's largest polluter (Producing more hazardous waste than the five largest U.S. chemical companies combined)
- However, there must be political will

#### Literature

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