

Climate Recovery Ordinance 350ppm Target Background

December 16, 2015



Climate Recovery Ordinance

1. Clarifies and codifies existing goals:

Reduce community-wide fossil fuel use 50% by 2030
Carbon Neutral City operations by 2020

2. Calls for an assessment of current efforts

Reported to Council February 2015

3. Calls for Targets and Benchmarks to achieve existing goals

Discussed with Council November 2015

4. Calls for the development of a science-based community greenhouse gas reduction goal

5. Calls for regular progress reports to Council

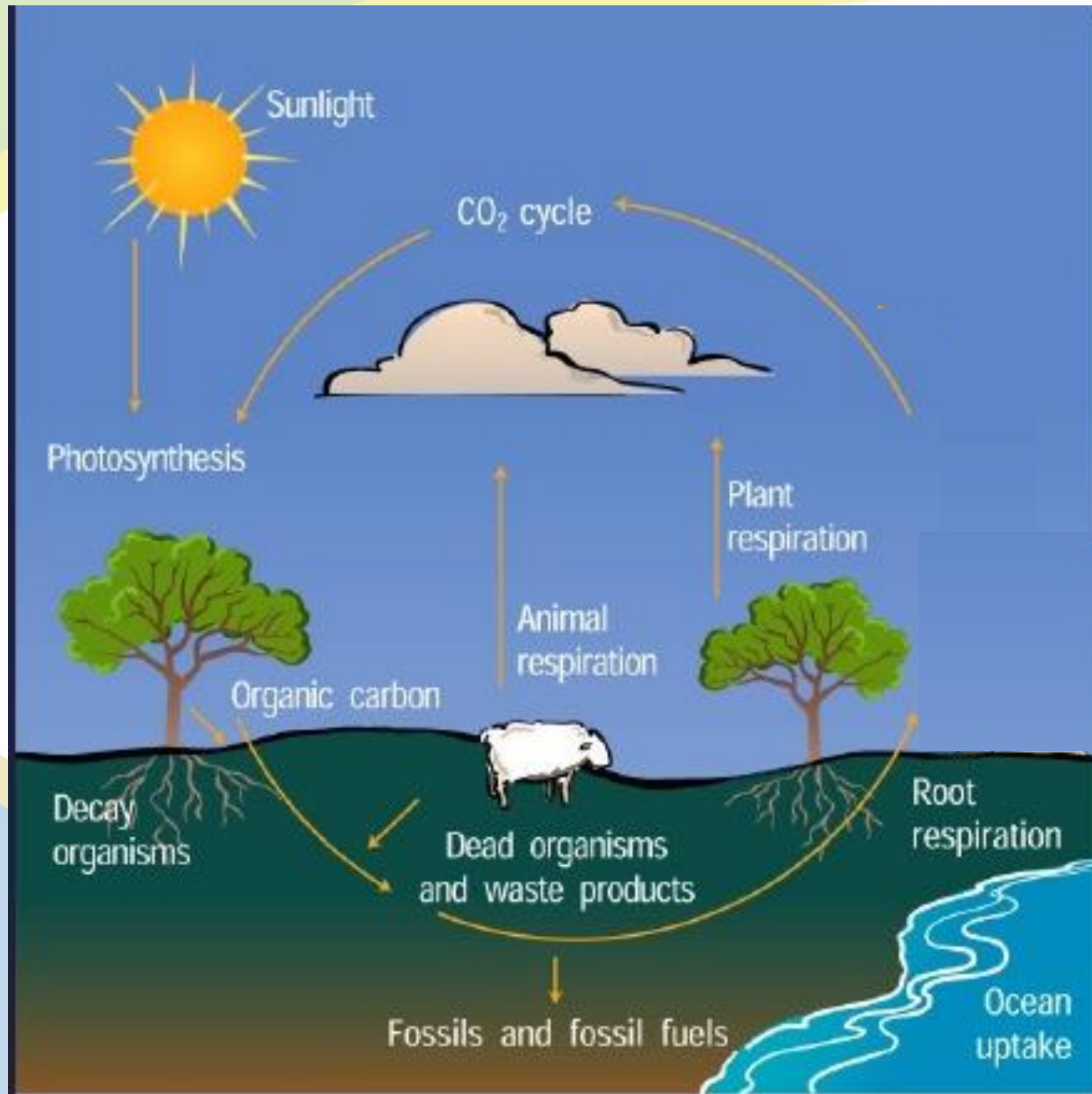
6. Establishes a process of analysis, reporting, and readjustment if community or internal targets are not met.



Overview

1. Not All Carbon Is The Same
2. The Greenhouse Effect
3. Carbon And Temperature
4. Feedbacks
5. Next Steps

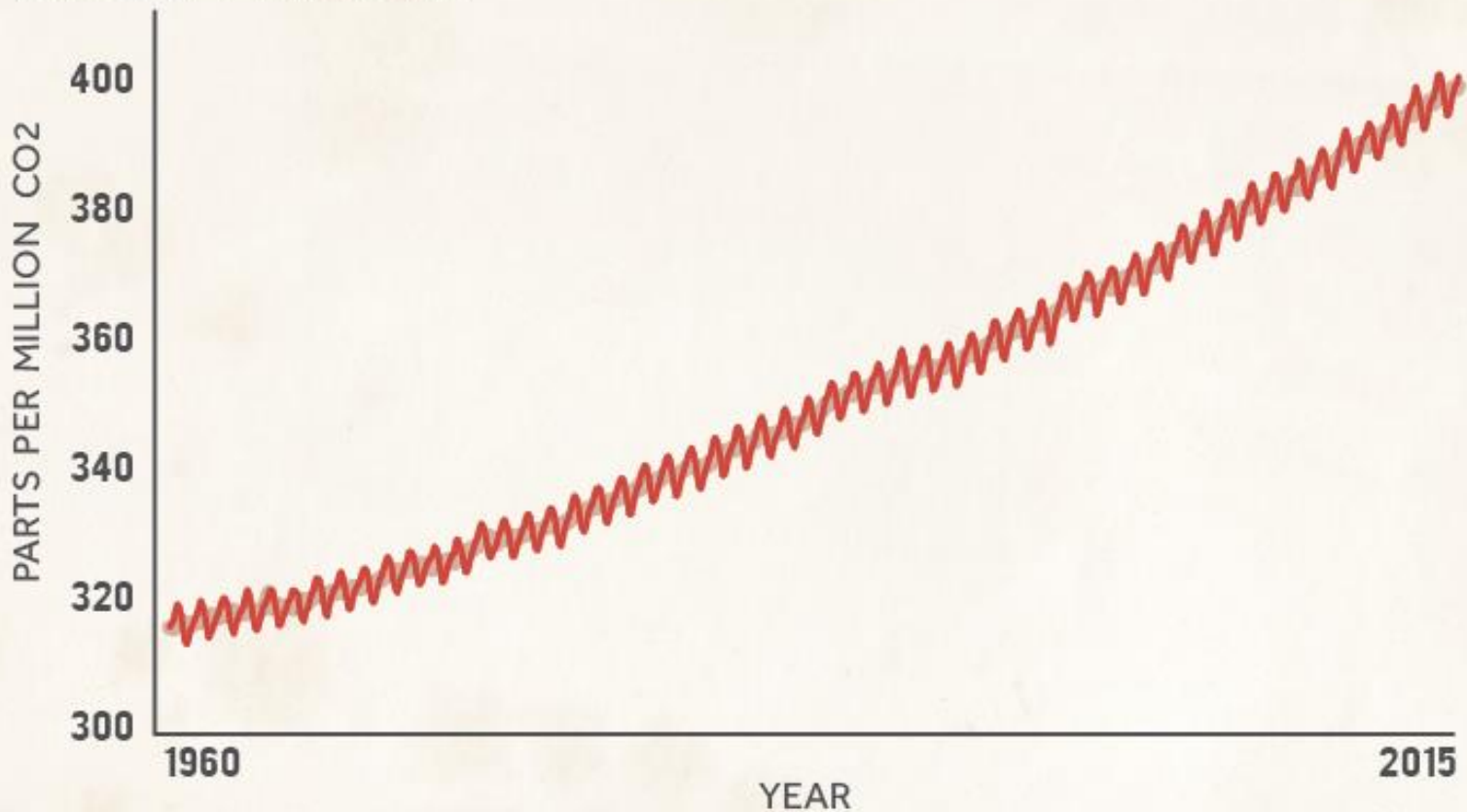
Not all Carbon is the same



350ppm

Rising Carbon Dioxide

To 400 PPM And Beyond?

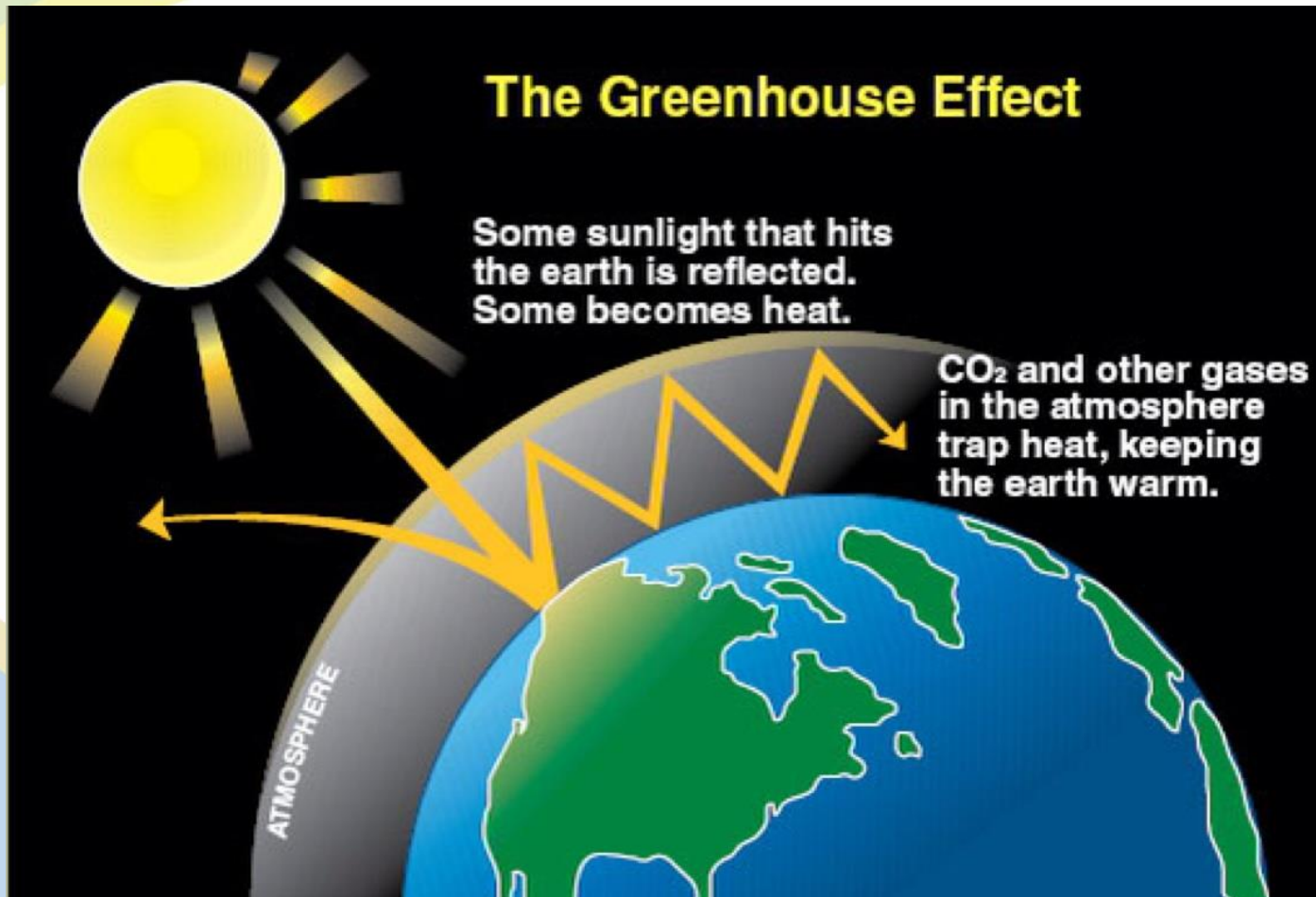


Data: Scripps Institute of Oceanography

CLIMATE  CENTRAL

Graphic credit: ClimateCentral.org

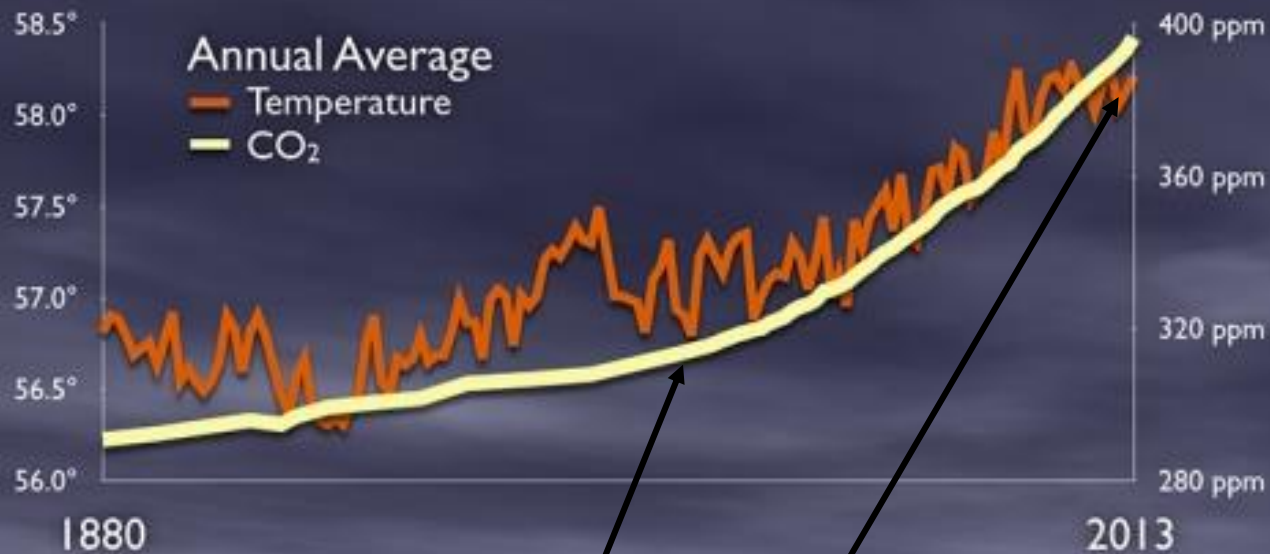
Greenhouse effect



Graphic credit: NOAA

Carbon and temperature

Global Temperature and CO₂



Source: National Climate Assessment 2014

CLIMATE CO₂ CENTRAL

Emissions Warming

Graphic credit: ClimateCentral.org

Feedbacks



Image credit: ClimateCentral.org

Feedbacks

September arctic sea ice extent 1979

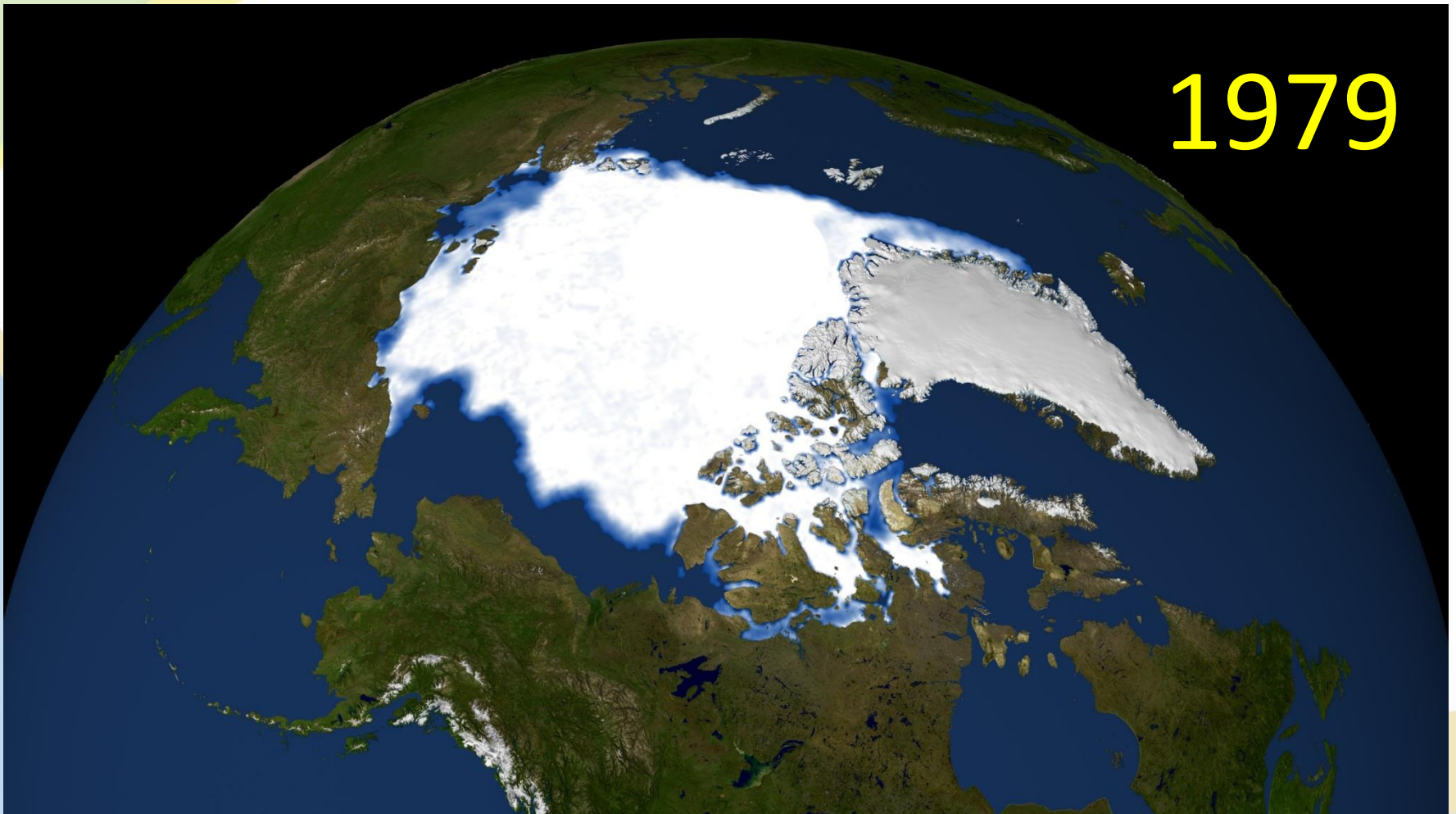


Photo credit: NASA/Goddard Space Flight Center Scientific Visualization Studio

Feedbacks

September arctic sea ice extent 2007

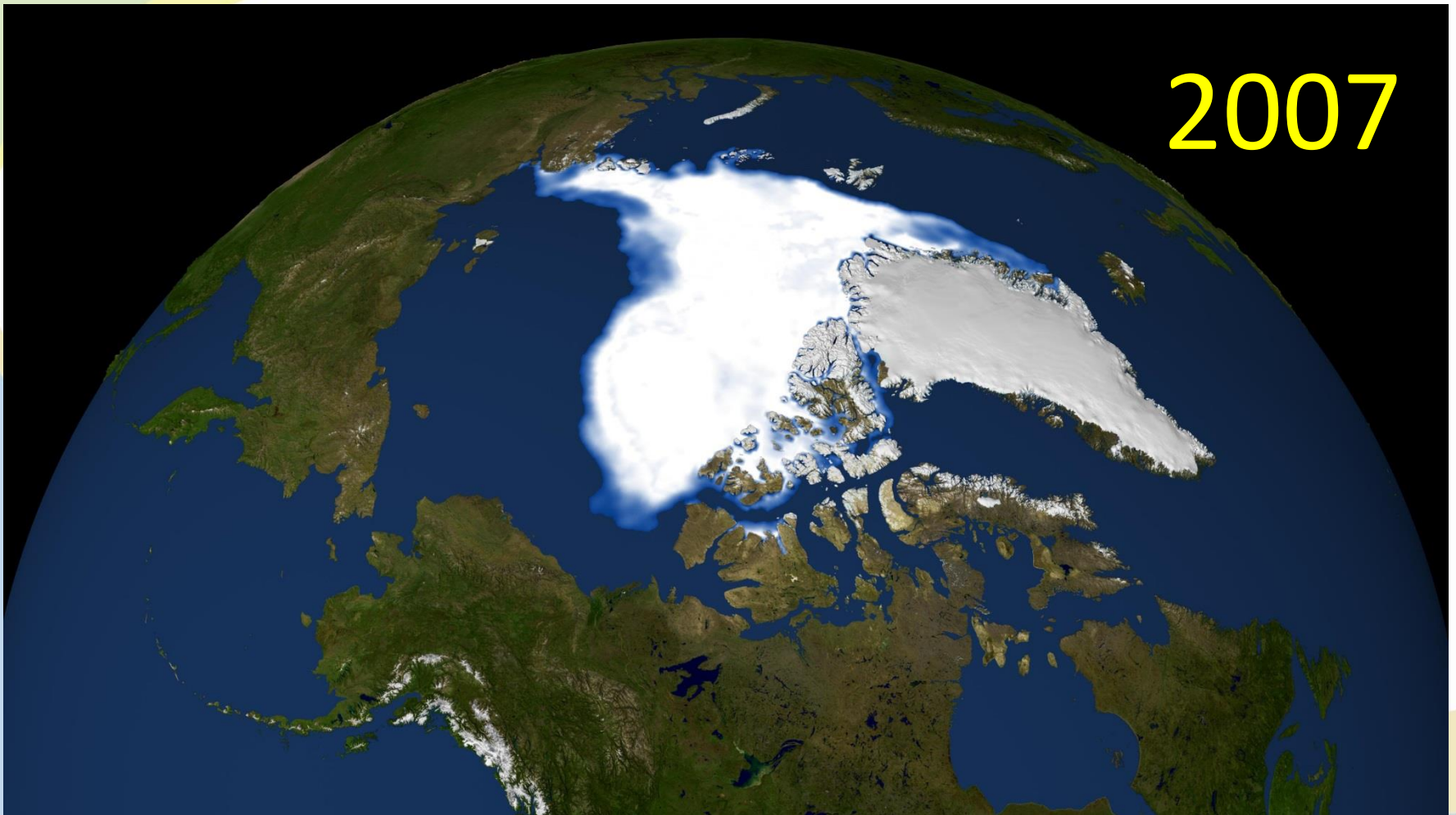


Photo credit: NASA/Goddard Space Flight Center Scientific Visualization Studio

Feedbacks

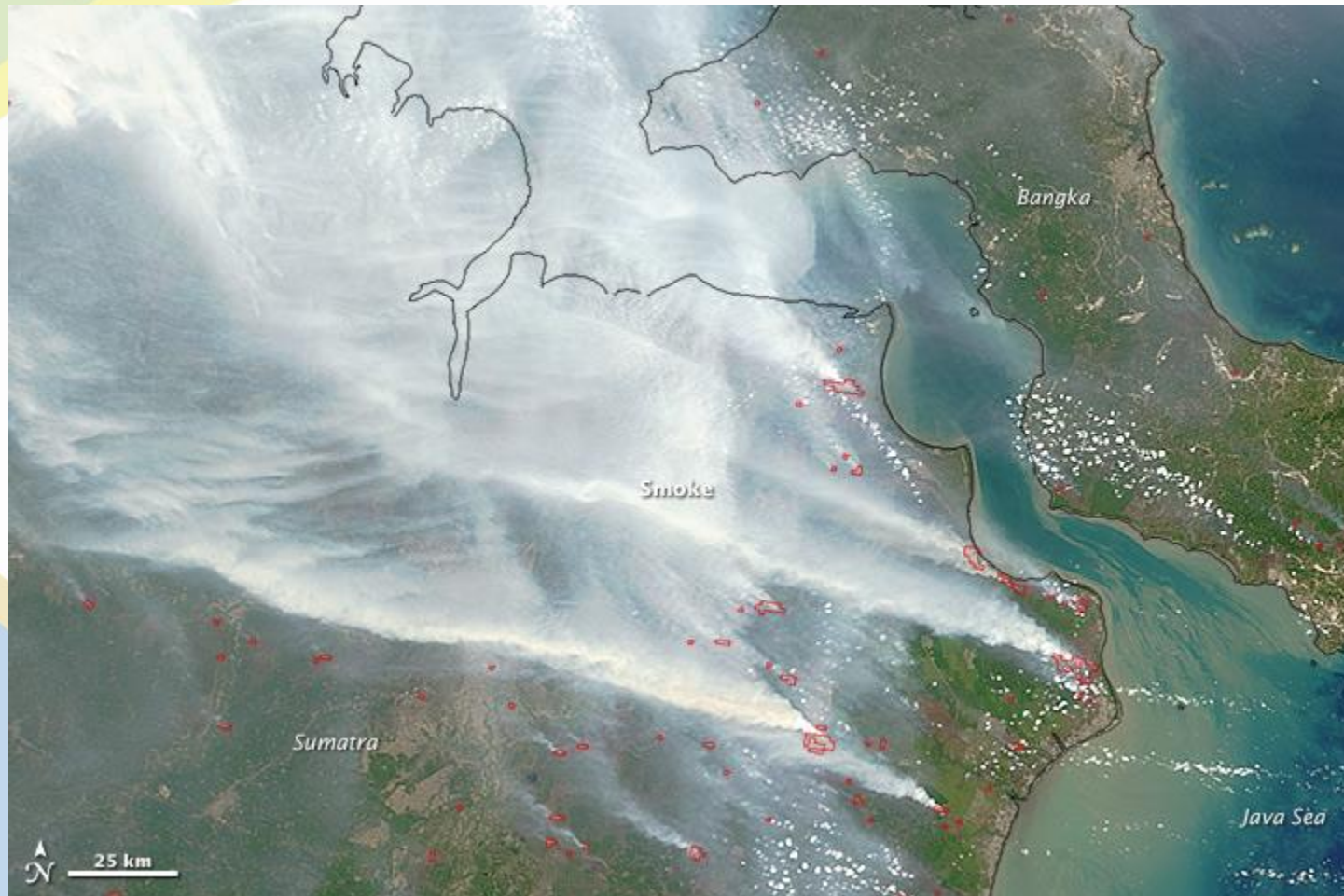


Photo credit: NASA

Feedbacks



Photo credit: United Nations Environment Program

Recap

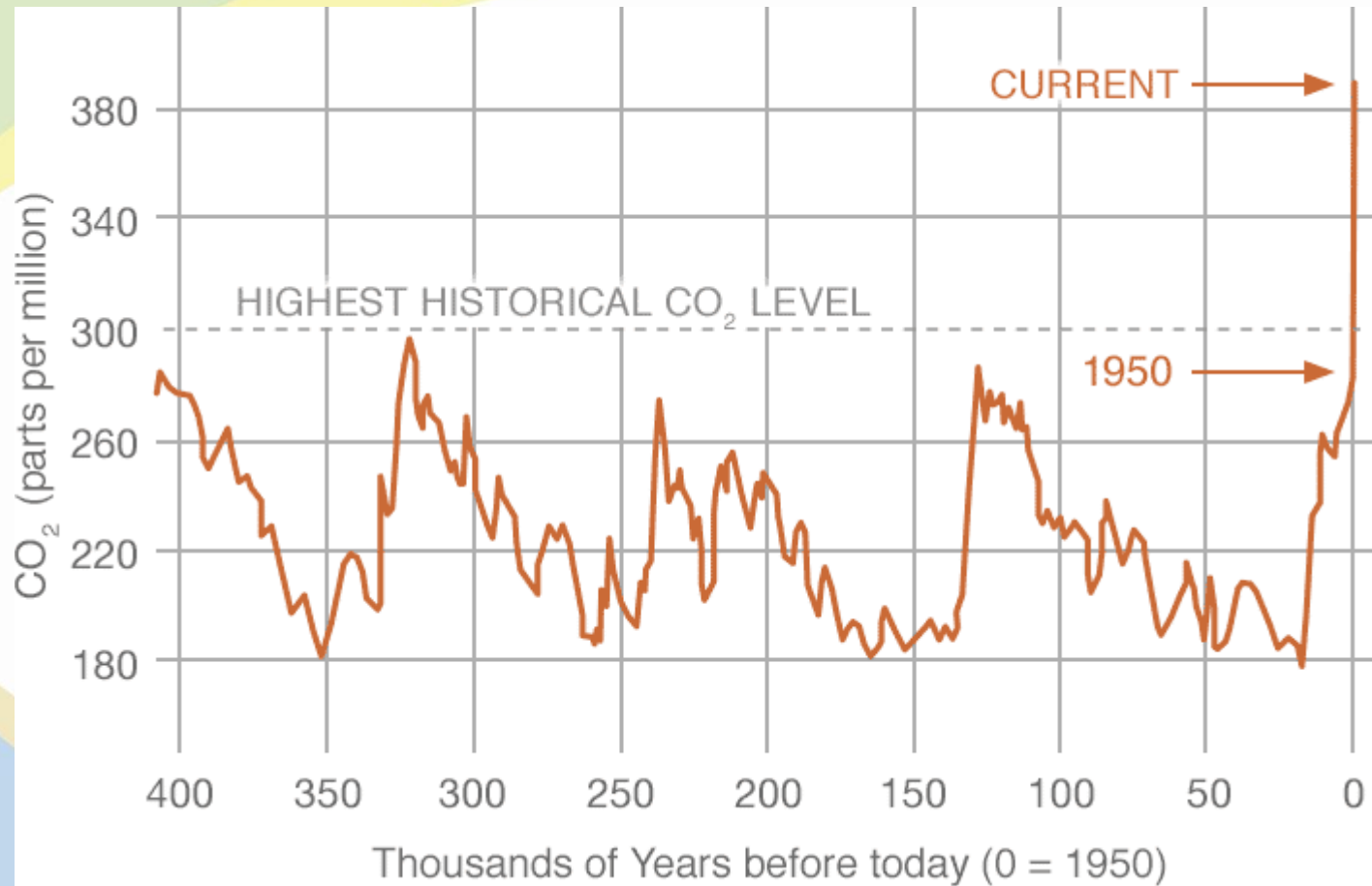
1. Rising CO₂ causes rising temperatures
2. Our influence
3. 350ppm would avoid feedbacks
4. Future work session

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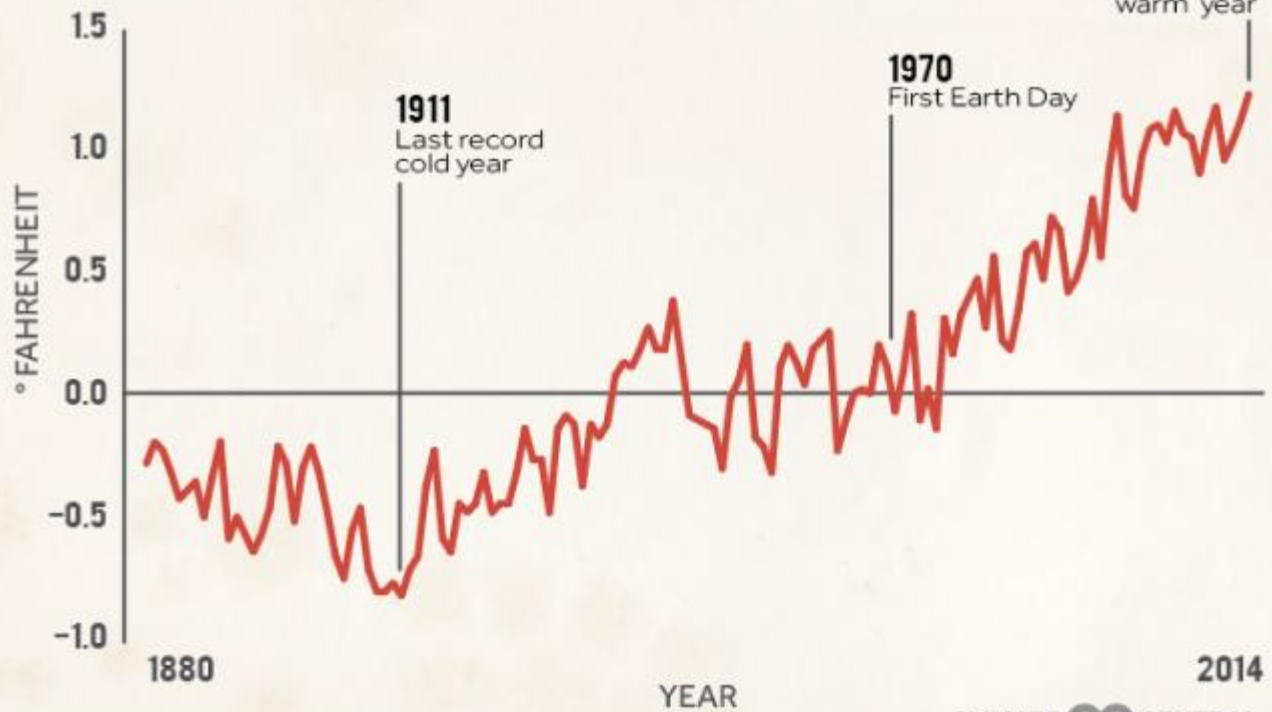
www.eugene-or.gov/sustainability

*Eugene City Council
December 16, 2015*



Global Average Temperature

A Warming Planet

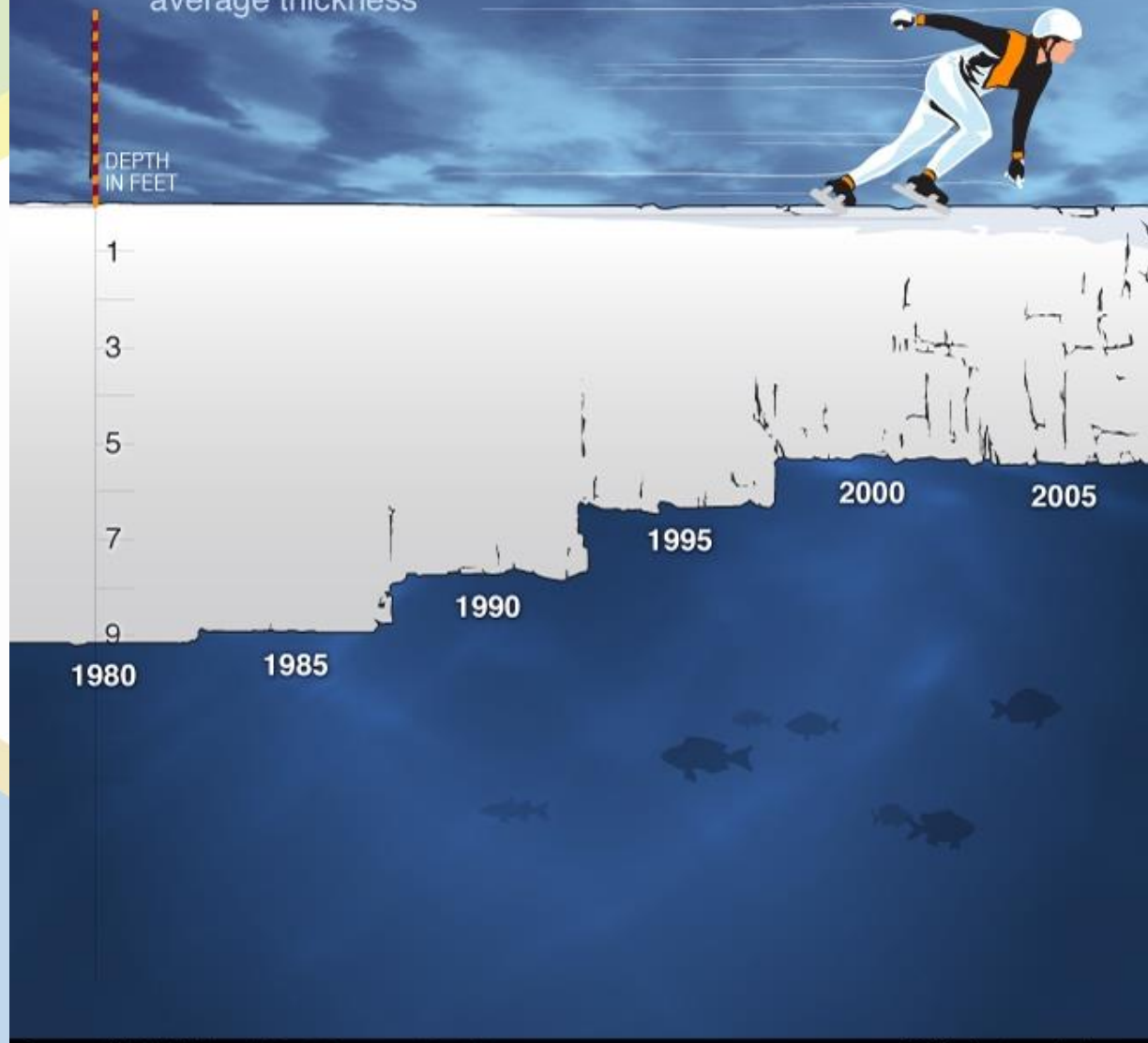


Data: NOAA National Climatic Data Center

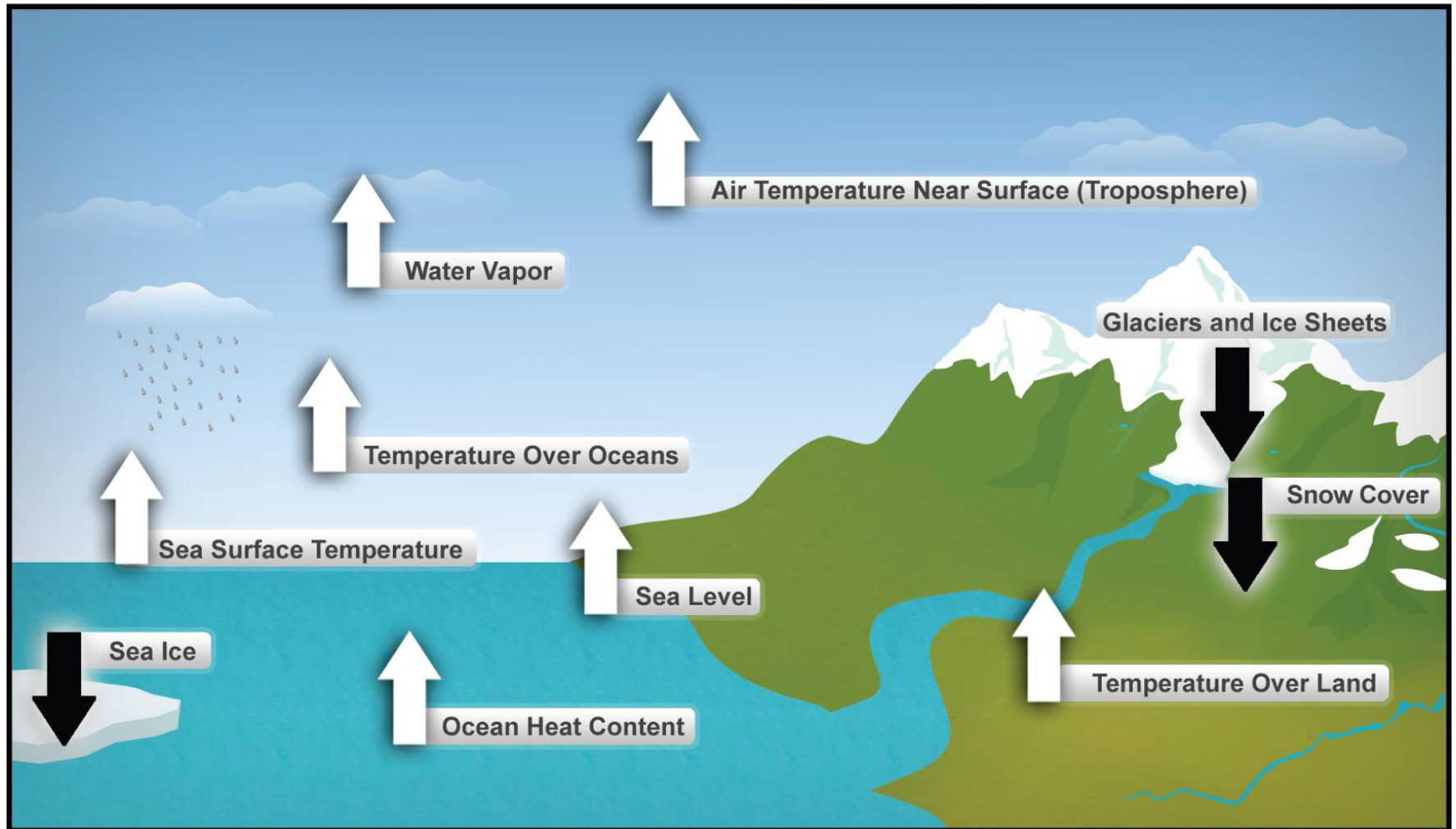
CLIMATE  CENTRAL

Thin Ice

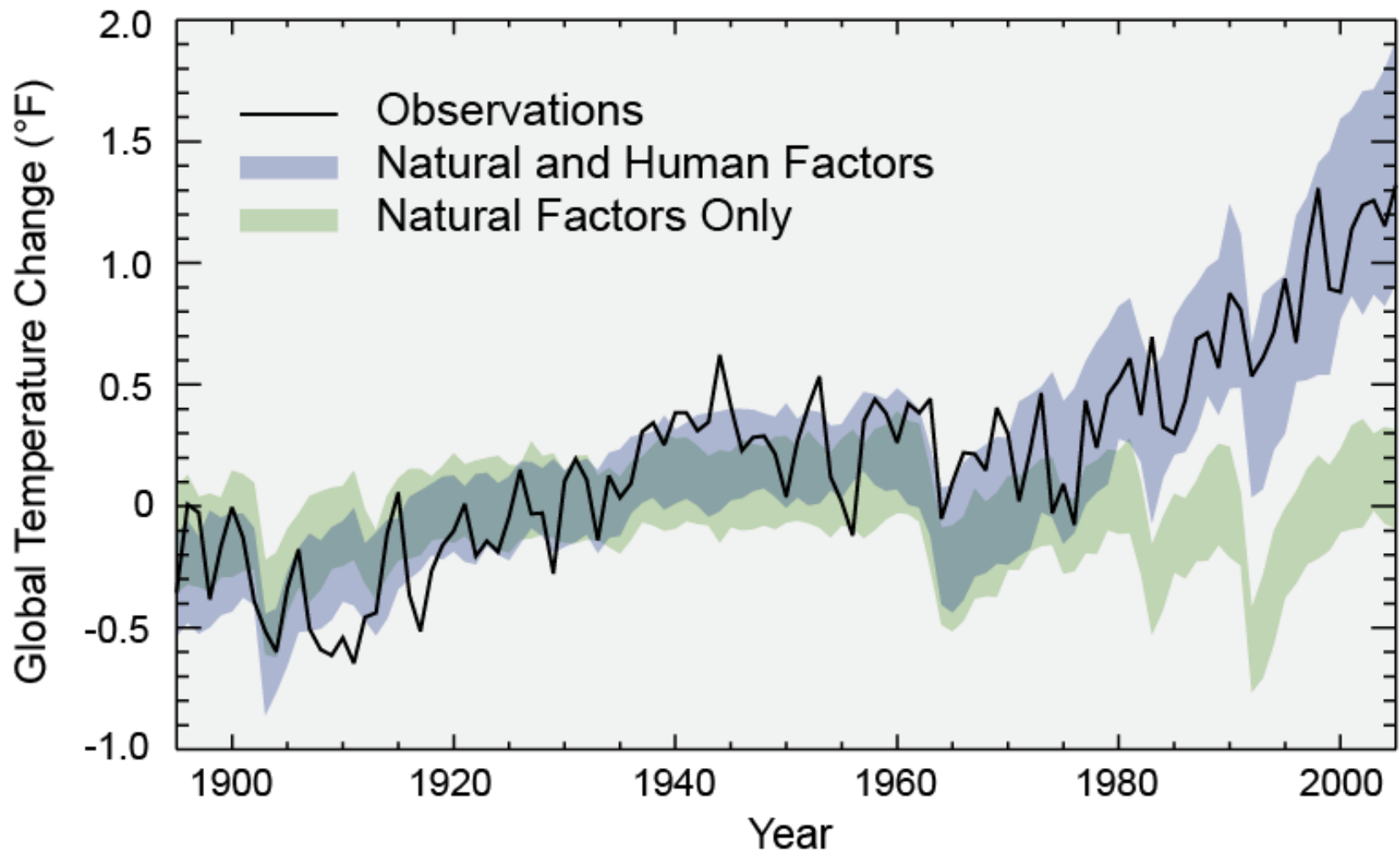
Changes in fall Arctic sea ice average thickness

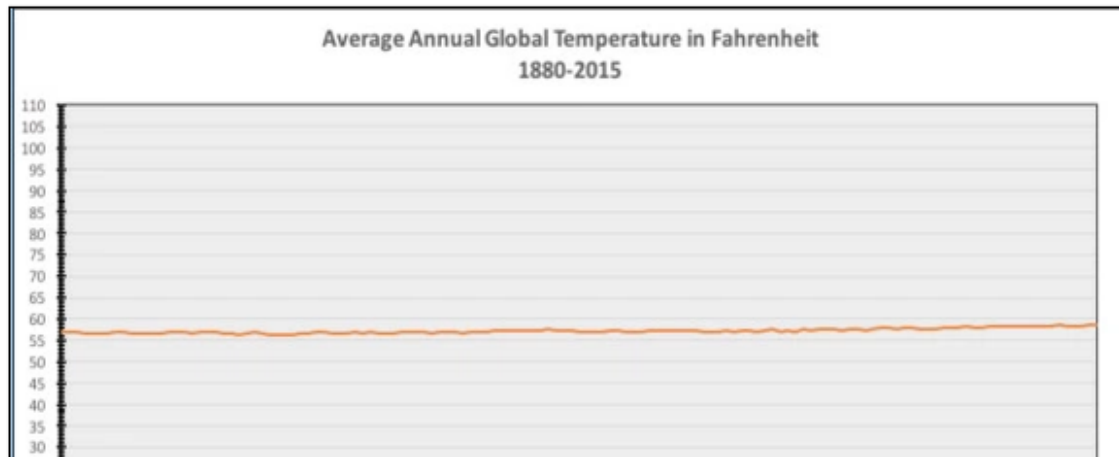


Ten Indicators of a Warming World



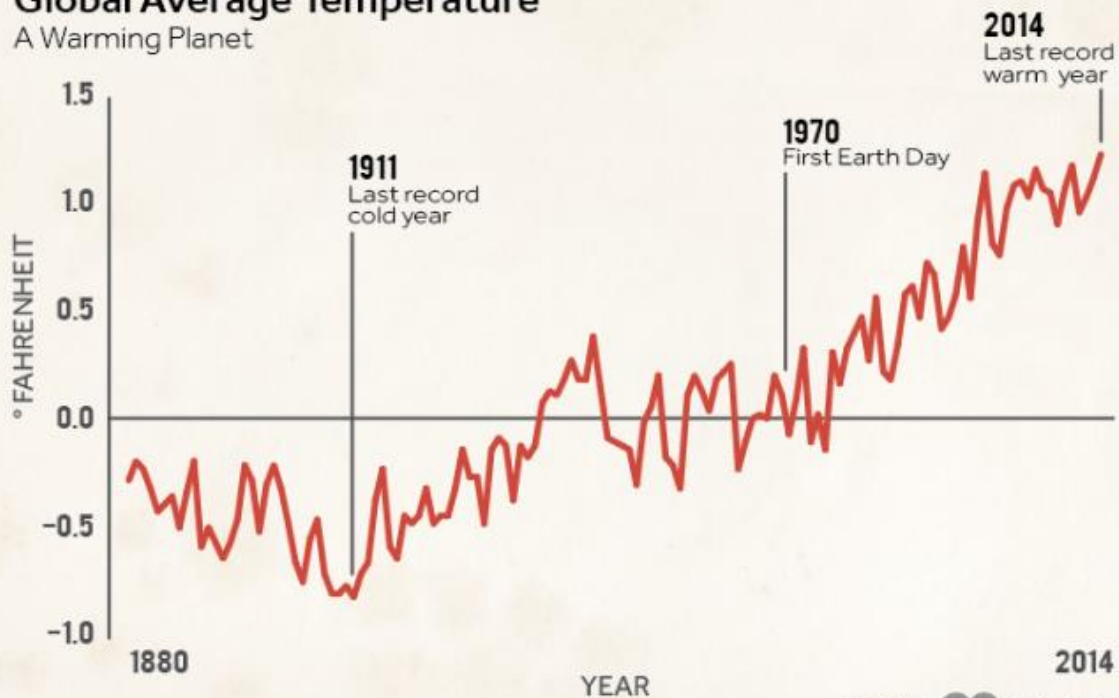
Separating Human and Natural Influences on Climate





Global Average Temperature

A Warming Planet



Data: NOAA National Climatic Data Center

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