

Why?

History of atmospheric carbon dioxide animation from NOAA: 800,000 years ago through January, 2019.

+

A tanking economy with millions unemployed due to the Coronavirus

+

Heightened awareness of Social Injustice

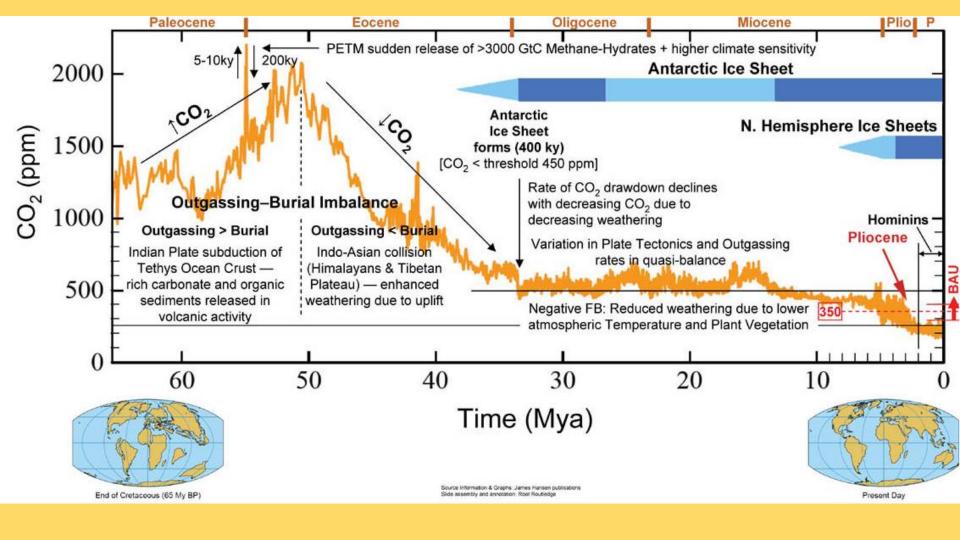
NOW IS OUR "OPPORTUNITY"

https://youtu.be/1ZQG59_z83I

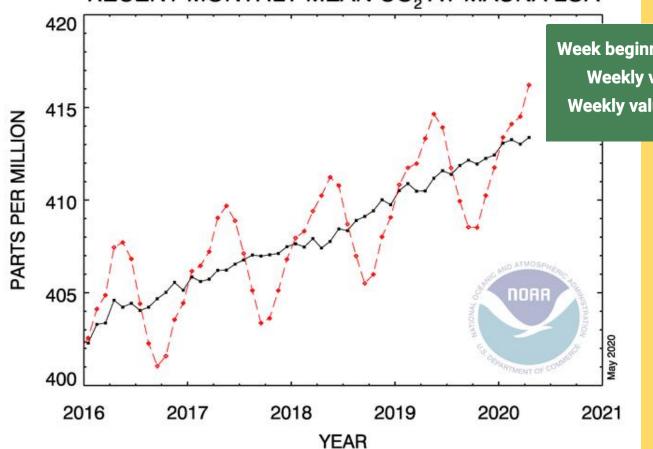
Animation of CO2 levels

One version from 2014: https://www.youtube.com/watch?v=UatUDnFmNTY

One version with carbon pump from 2019: https://www.esrl.noaa.gov/gmd/ccgg/trends/history.html







Week beginning on May 24, 2020: 417.43 ppm

Weekly value from 1 year ago: 414.40 ppm

Weekly value from 10 years ago: 392.63 ppm

Last updated: May 31, 2020

Himalayas seen for the first time in 30 years



Can we see a change in the CO₂ emissions because of COVID-19?

Short answer is "NO" - emissions are lower but we're still emitting

CO₂ emissions are ~ 25% lower March & April¹ = 0.2PPM CO₂ per month²

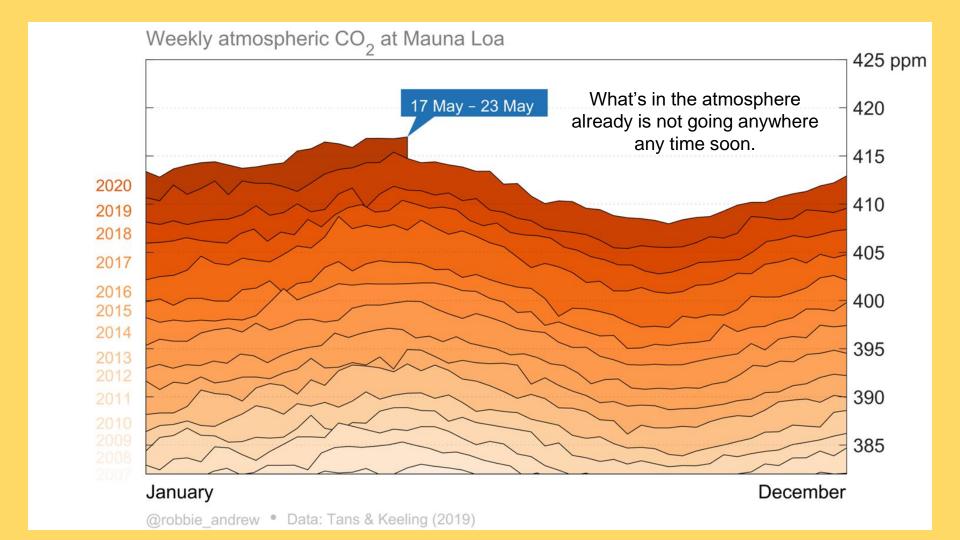
2020 global CO₂ emissions expected to drop by ~ 8%

2021 global CO₂ emissions expected to increase by ~ 3.6%.

Overall result is negligible

¹ Nature https://www.nature.com/articles/s41558-020-0797-x

² NOAA https://www.esrl.noaa.gov/gmd/ccgg/covid2.html



Can we see a change in the CO₂ emissions because of COVID-19?

Need to cut our emissions by 8% **EVERY YEAR** to reach the 1.5°C goal by 2030³

We're seeing a global temporary decrease in CO₂ HOWEVER we are still emitting and adding to the CO₂ in the atmosphere that is already warming the climate.

What we ARE seeing is a decrease in air pollution - particulate matter.

This MAY actually exacerbate warming because particulate matter can reflect sunlight back into space⁴

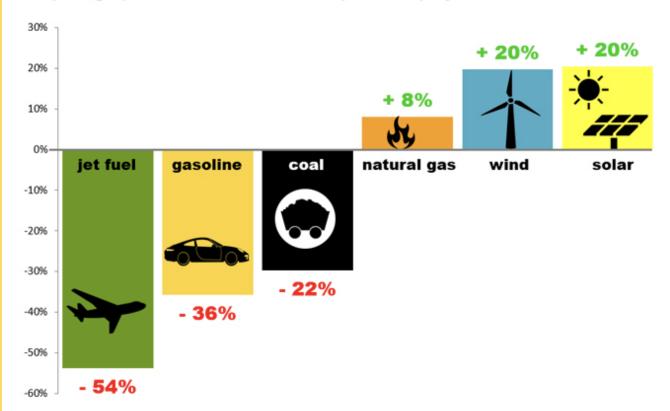
³UNEP (United Nations Environment Programme) https://www.unenvironment.org/interactive/emissions-gap-report/2019/

⁴Veerabhadran Ramanathan, Scripps Institution of Oceanography

Must tackle Climate Change with aggressive investments in alternative energy sources (putting a price on carbon?) and technology to remove and sequester CO₂ and other GHGs.

Precipitous drop in U.S. fossil fuel consumption

Comparing April 2019 actual use and April 2020 projected use



More renewables coming online

Costs continue to decrease

Less demand allows utilities to choose least expensive resources

Data from the U.S. Energy Information Administration. Graphic by Karin Kirk for Yale Climate Connections.

Questions so far?

History of the Green New Deal

<u>Thomas Friedman</u> penned the name in 2007 in NYTimes column as the global financial crisis began unfolding:

- End to fossil fuel subsidies
- Tax carbon dioxide emissions
- Create incentives for wind and solar
- Following "New Deal" concept that Franklin D. Roosevelt coined 76 years earlier to describe the labor reforms and historic spending on infrastructure and armaments that pulled the United States out of the Great Depression

Picked up by the Obama campaign

History of the Green New Deal - 1st Obama Admin

All democratic administration 2008-2010. Focused on financial crisis, climate change and healthcare

Stimulus bill (<u>American Recovery and Reinvestment Act</u>) provided \$90B clean energy investments and tax incentives - kick-started the renewable energy boom ½ of the total recovery bill.

Created Jobs - Scaled up Renewable Energy Generation - Reduced Cost - <u>Drove Innovation</u> (ARPA-E) - Improved Energy Efficiency - Promoted Grid Modernization - Advanced Vehicle Fuel Technology - Stimulated Growth in Energy Storage

History of the Green New Deal - 1st Obama Admin.

Tried to pass American Clean Energy and Security Act (also known as Waxman-Markey bill)

- First cap and trade bill
- Passed by House in 2009
- Dies in Senate
- Politics behind it were daunting, particularly after the fight for the Affordable
 Care Act

• Green New Deal dies :-(

History of the Green New Deal - 2nd Obama Admin.

2012 State of the Union, Obama makes clear that an "all-of-the-above energy policy" would be his stance that election year

Obama looked to natural gas as the bridge to alternatives → **fracking** boom

US-China Joint Announcement on Climate Change and Clean Energy Cooperation 2014

<u>Clean Power Plan 2015</u> (EPA) aimed to cut carbon pollution from power plants 30% from 2005 levels

Rejected expansion of Keystone XL pipeline 2015

History of the Green New Deal - 2nd Obama Admin.

Momentum carried into signing of the <u>Paris Climate Agreement</u> to work collaboratively to keep temperature below 2°C of warming over pre-industrial level

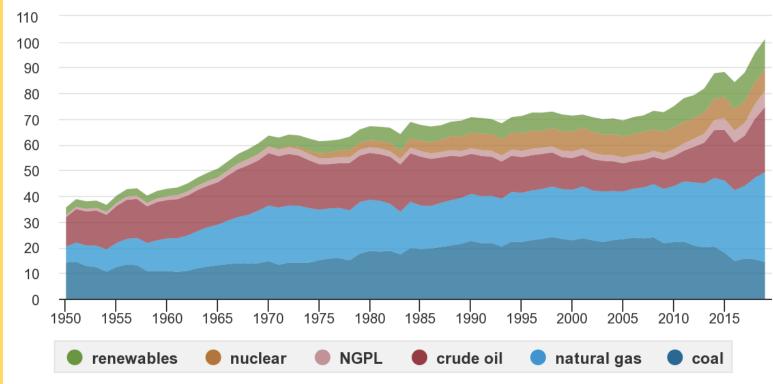
Saw significant **reductions in CO₂** primarily due to fuel standards and demise of coal; but... increase in gas

Used an obscure provision of the 1953 Outer Continental Shelf Land Act to announce what he said would be a **permanent ban on offshore oil and gas drilling** along wide areas of the Arctic and the Atlantic coast.

By the end of Obama admin, US is the #1 producer of fossil fuel energy but, also #1 consumer and emitter (per capita)

U.S. primary energy production by major sources, 1950-2019





Note: NGPL is natural gas plant liquids.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, Table 1.2, April 2020, preliminary

data for 2019





Shock turns to action

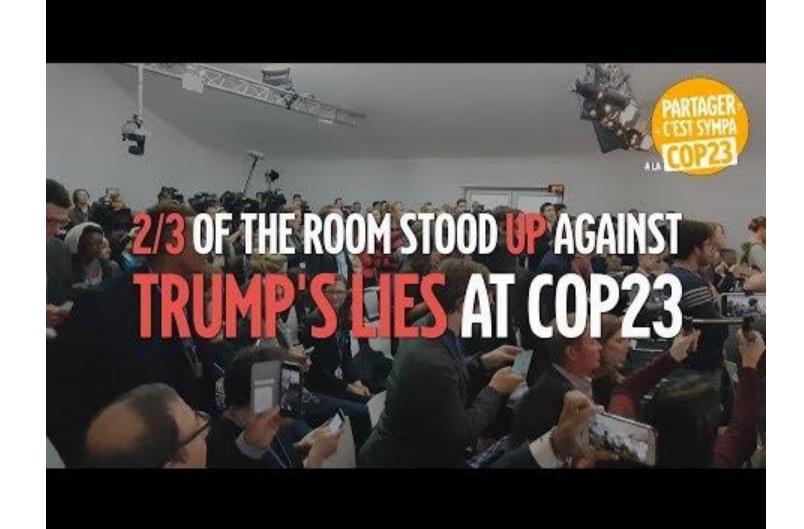
Ushers in a movement of youth led groups deeply invested in creative, nonviolent disruption

sustain

U.S. Youth for Justice and Sustainability



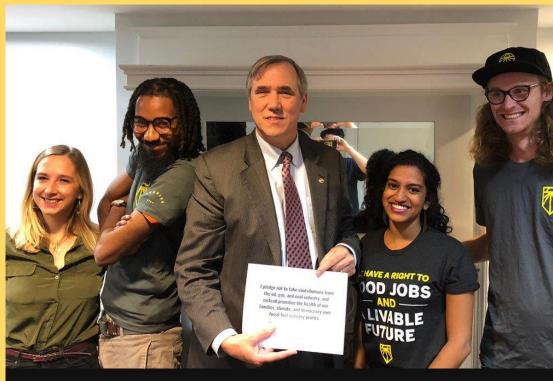
SustainUS | US Youth for Justice and Sustainability



11/17 Bonn



Pushed 2018
Candidates to Sign on to the NO FOSSIL
FUEL MONEY
PLEDGE



THANK YOU SENATOR MERKLEY

FOR SIGNING THE

#NOFOSSILFUELMONEY PLEDGE

We Win!!!

2019 Diverse
Group of
Progressive
Freshman
Representatives in
Congress

Hit the ground running with the Green New Deal



11/2018



12/2018



This protest spurred me into activism.

I could either get arrested - or - go to visit my congressperson.

I made an appointment and spent 30 minutes with the Rep. Kilmer's legislative Director talking about climate change and the Green New Deal



What is the GND?

A massive mobilization of resources and people:

- Investing public funds in renewable energy
- Building a zero-emission transportation infrastructure
- Insulating homes & buildings to conserve energy
- Establishing training programs to educate a national corps of workers to carry out the jobs

Clean energy = good jobs = clean air = clean water = equity of health and environment = social justice

GND Goals

- 1. Achieve net-zero greenhouse gas emissions through a fair and just transition for all communities and workers
- 2. Create millions of good, high-wage jobs; and ensure prosperity and economic security for all people of the United States;
- 3. Invest in the infrastructure and industry of the United States to sustainably meet the challenges of the 21st century
- 4. Secure clean air and water, climate and community resilience, healthy food, access to nature, and a sustainable environment for all
- 5. Promote justice and equity by stopping current, preventing future, and repairing the historic oppression of frontline and vulnerable communities.

GND Projects

- Replacing or upgrading every U.S. building to achieve maximal energy efficiency, water efficiency, safety, and durability. Creates jobs.
- Meeting 100 percent of our power demand through clean, renewable, and zero-emission energy sources. Massive public investment.
- Making massive investments into U.S. manufacturing industries to remove pollution and greenhouse gas emissions.
- Overhauling U.S. transportation systems to eliminate pollution and greenhouse gas emissions.

Status of GND

H.Res.109 - 2/2019 Recognizing the duty of the Federal Government to create a Green New Deal. Co-sponsors: 99; including Pramila Jayapal and Adam Smith from WA

S.Res.59 - 2/2019 A resolution recognizing the duty of the Federal Government to create a Green New Deal. Co-sponsors = 14; neither Cantwell or Murray

First bill: H.R.5185 an S.2876 - Green New Deal for Public Housing Act 11/2019

 Rehabilitate, upgrade, modernize all Public Housing for efficiency and move toward expansion of renewables.

Rep. Kilmer's thoughts on GND: "Too polarizing..." but realizes that we can "call it what we want" we must take "bold action"

The GND and planning for a new administration

Biden Climate Task Force

- Co-leaders: Rep. Alexandria Ocasio-Cortez, co-author of the GND, and John Kerry (World War Zero)
- Bernie Sanders endorses <u>Varshini Prakash</u> (Exec. Director of Sunrise Movement) as member.
- Rep. Kathy Castor (D-Fla.), Chair, Select Committee on the Climate Crisis
- Kerry Duggan, of Detroit, Energy and environment policy aide to Biden
- Catherine Flowers, founder of the Alabama-based Center for Rural Enterprise and Environmental Justice
- Gina McCarthy, president and chief executive officer of the Natural Resources Defense Council
- Rep. Donald McEachin (D-Va.)

So where do we go from here???

<u>Pandemic + election</u> = <u>NOW IS THE TIME</u> to transform our fossil fuel driven economy - "Once in a generation opportunity"

Prior to the pandemic, <u>clean energy jobs outnumbered fossil fuel jobs</u>
3:1 and growing! (60% growth anticipated by 2030)

MUST pressure our House and Senate to

- 1) Provide Renewable Energy Stimulus
- Continue/reinstate tax incentives and credits for renewable energy expansion see Action Page for Western Organization of Research Councils
- 3) Fossil Fuel Industry is collapsing don't let our government bail them out!!!
- 4) Is it time for a Carbon Tax? (HR 763: Energy Innovation and Carbon Dividend Act)

How do you do that???

Every politician says:

- 1. Write Letter to Editor is #1 Attention Getter
- 2. Show up at Town Halls go with an "ask"
- 3. Call their offices
- 4. Write/email

Example: H.R.5845 - Break Free From Plastic Pollution Act of 2020

Article with links to a lot happening on climate at the federal level

What can we do?

Community Solar WA: Collective or sharing model for going solar. Participants put up the money to build a larger solar array and then share the benefits among themselves as well as with the place where the solar is sited.

https://www.solarwa.org/community_solar

Jefferson County PUD Community Solar Take the Survey!!! Bring Community Solar to JeffCo

State Bill HB 2248 Expanding equitable access to the benefits of renewable energy through community solar projects through grants. Passed both State Houses. Governor vetoed due to anticipated hit to budget re: COVID

Thought Experiment on a Green Economy for OlyPen

Aspect of our local economy	How do we move beyond
Natural Resources	Logging, mills, fishing, canneries, dams
Agriculture	Pasture, row crops
Construction/Development	Urban Sprawl and Loss of Farmland
Tourism	Family cars; RVs
Port	Oil import; Log export; Topside repair
Intellectual property (brain power)	Scattered
Imported income (people w/ \$)	Pensions, social security
Energy	Imported