

# What to do (about global warming)

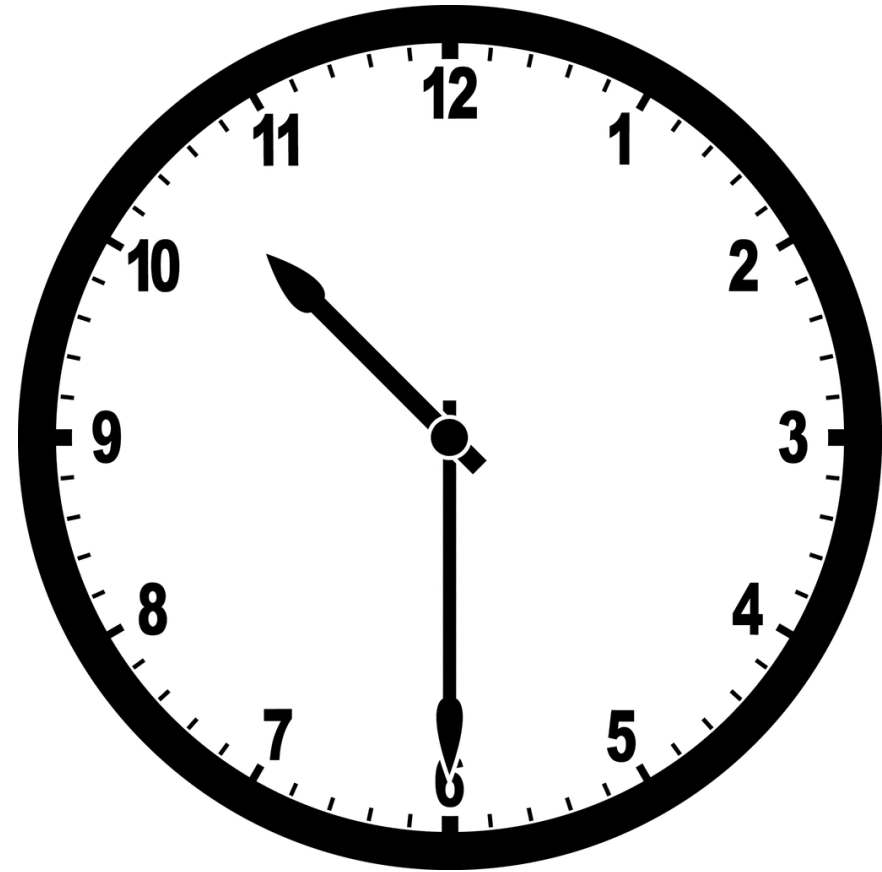
Coty Keller, St. James Long Beach

Creation Care Retreat

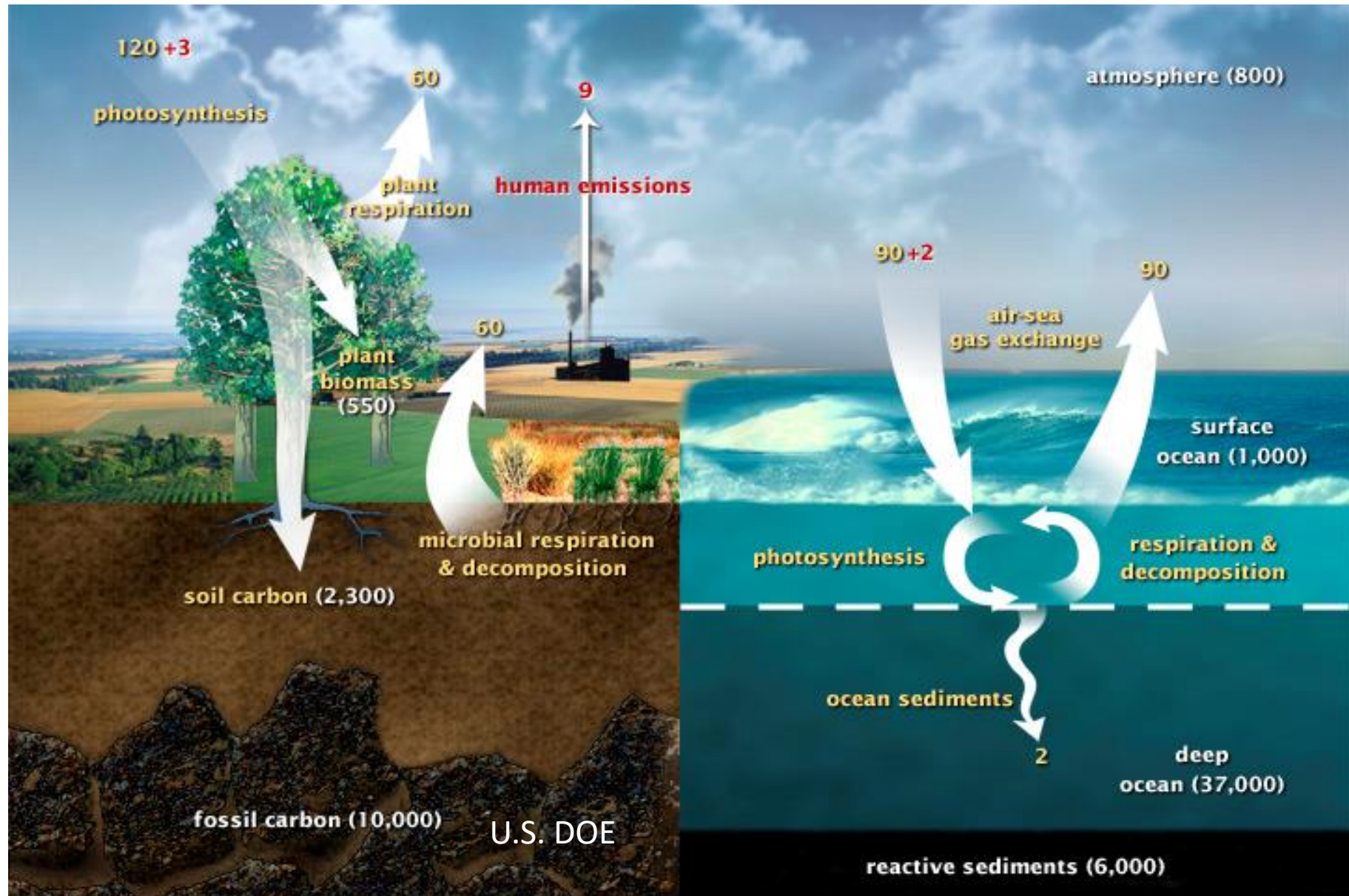
October 1, 2022

# Agenda

- Causes
- Bold and Urgent Action
- What we can do:
  - In our parish
  - Individual/families/businesses
  - Influencing Government
- Summary, Conclusions



# Cause: The Carbon Cycle Out of Balance



# Cause: Food System, Farm Practices

- 20-30% of total emissions
- Fuels epidemics of diabetes and heart disease
- Exploits worker, worsens racial and income inequality
- Dominant farming methods despoil the landscape, pollute air and water and accelerate climate change



Photo credit: Union of Concerned Scientists

EPA and FAO data, Earthjustice, Union of Concerned Scientists

# What do we need to do?

## **Adaptation** (Resiliency)

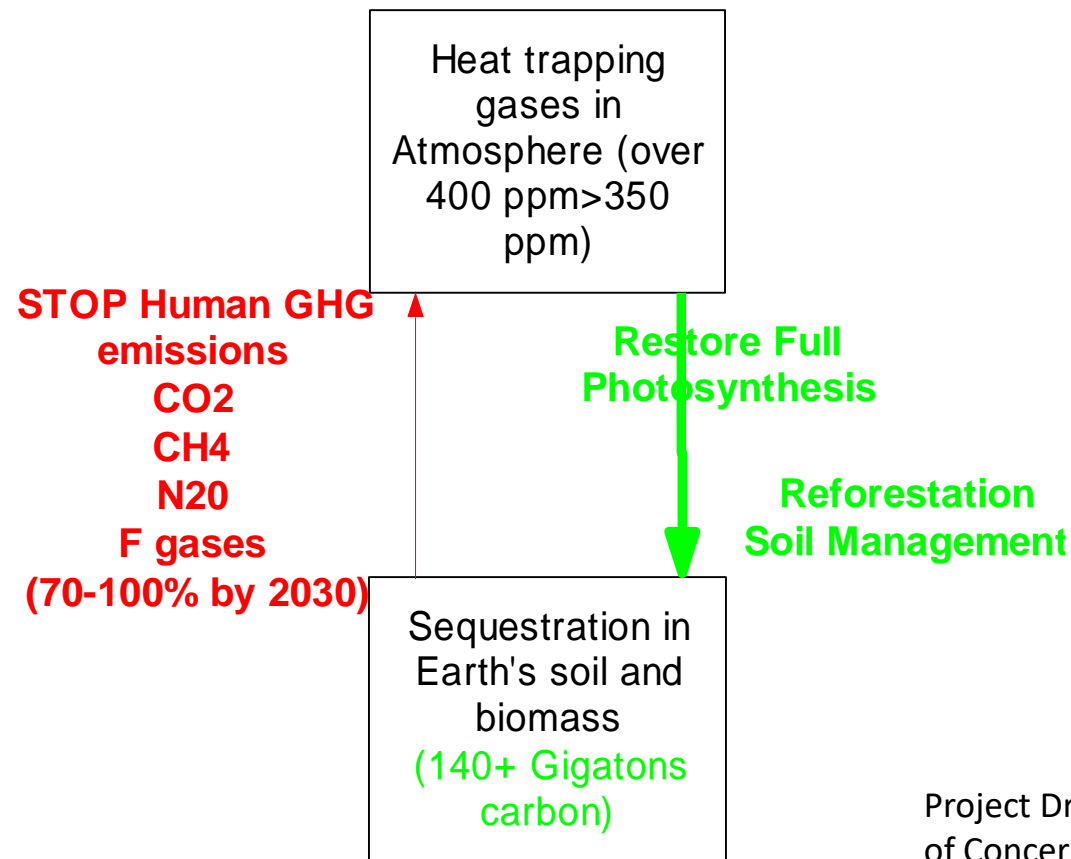
- Adaptation: the process of adjusting to actual or expected climate change
- Elevate and protect buildings. Etc.
- We cannot focus exclusively on adaptation; The climate will continue changing and the long-term impact of global warming will be too severe to manage

Intergovernmental Panel on Climate Change. Jeffrey Ravens  
2017 "To Curb Climate Change, Cities Need the Right Design"  
*Forbes*

## **Mitigation:** Long-term Solution

- Mitigation: human intervention to reduce heat-trapping emissions or remove carbon already in the atmosphere
- Mitigation attacks the causes of global warming

# Mitigation Solution: Bold and Urgent Action



- Reforestation, Afforestation
- Improve food system
- Reduce Energy Consumption
- Electrify (almost) everything, generate power from ***non-emitting power sources***

Project Drawdown, 2019 climate gap report, 4<sup>h</sup> National Climate Assessment, Union of Concerned Scientists, *Solutions*. This Spaceship Earth,, Bill Gates *How to Avoid a Climate Disaster*. Omega Institute, U of VT.

# Non-emitting and sustainable energy sources

- Solar
- Wind
- Nuclear
- Small hydro
- Geothermal

Project Drawdown  
Union of Concerned Scientists  
Bill Gates *How to Avoid a Climate  
Disaster*

# Who needs to do what specifically

## Government's Role

- Federal
- State
- Local

## Government means

- Carrot: Incentives
- Stick: Command and control, mandates, rules

## Action In our own realm

- Houses of worship
- Individuals, families
- Businesses, other non-profits
- Farms

Union of Concerned Scientist- *Cooler, Smarter*, Bill Gates - *How to Avoid a Climate Disaster*



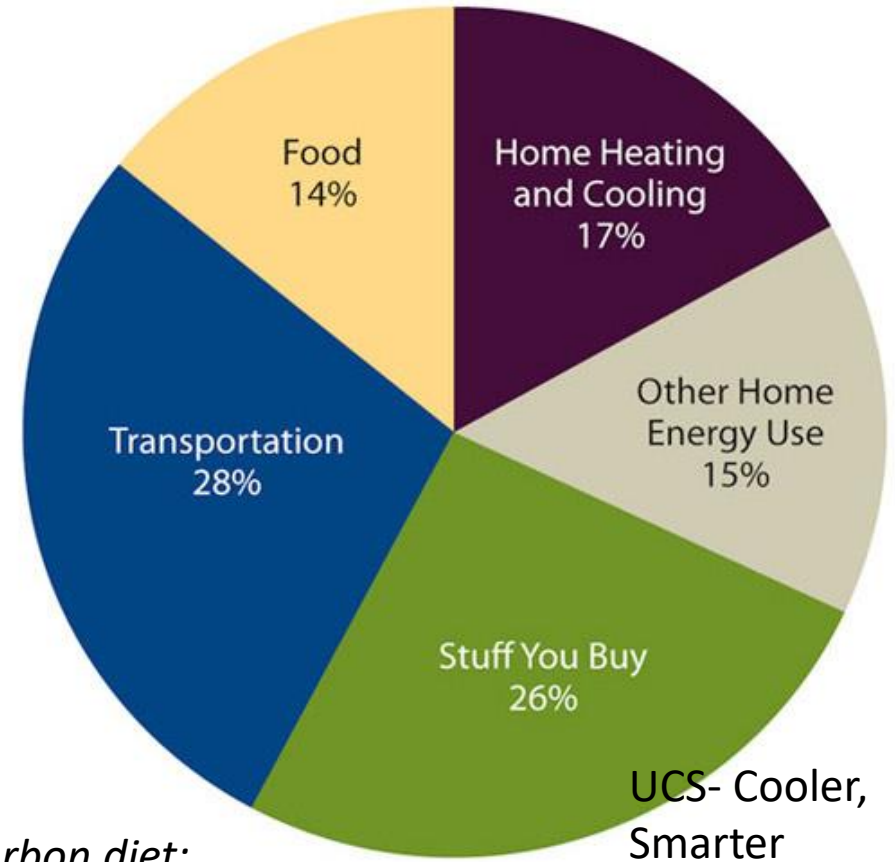
# Action in Our Own Realm -Eliminate Emissions

Direct emissions – Determine how much energy is being consumed and estimate the resulting emissions (carbon counter tools, Energy Audit).

- Buildings – Reduce consumption, transition to non-emitting energy sources
- Transportation – Conserve (avoid driving, reduce/eliminate long distance travel, chose best means) and shift (bikes, EVs charged from Sun)

*UCS, Cooler, Smarter. 40,000 Pound carbon diet: how a middle-class family cut emissions 75% and saved money doing it.*

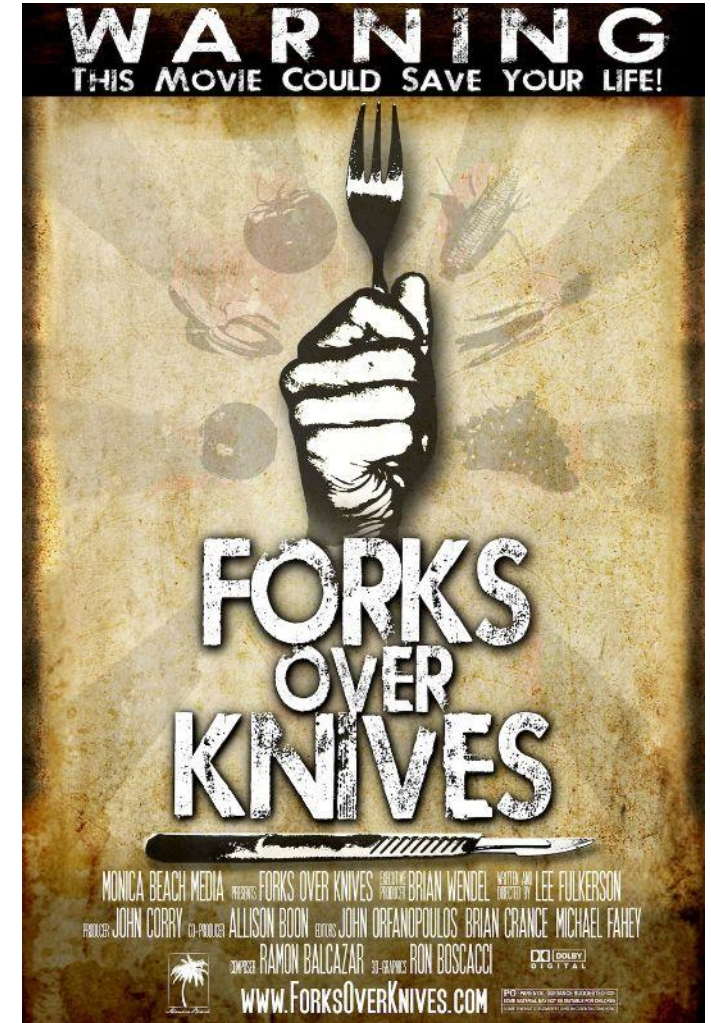
Where the Average American's Carbon Emissions Come From



# Indirect Emissions: What we eat and waste

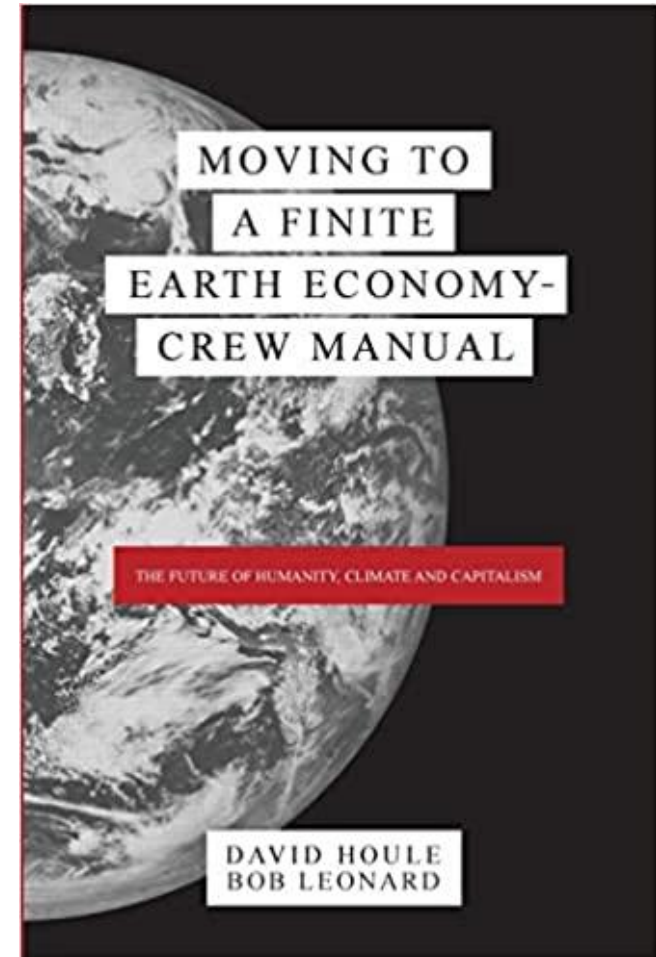
- Red meat and cheese have most impact on emissions
- Plant-Rich Diet
  - Climate benefits - #4 of 100 *Drawdown*
    - -70% Vegan
    - -63% Vegetarian
  - Health and financial benefits
- Support Community Sponsored Agriculture (CSA)
- Reduce food waste: buy less, compost, food recovery programs

Union of Concerned Scientists – *Cooler, Smarter*. Project Drawdown:

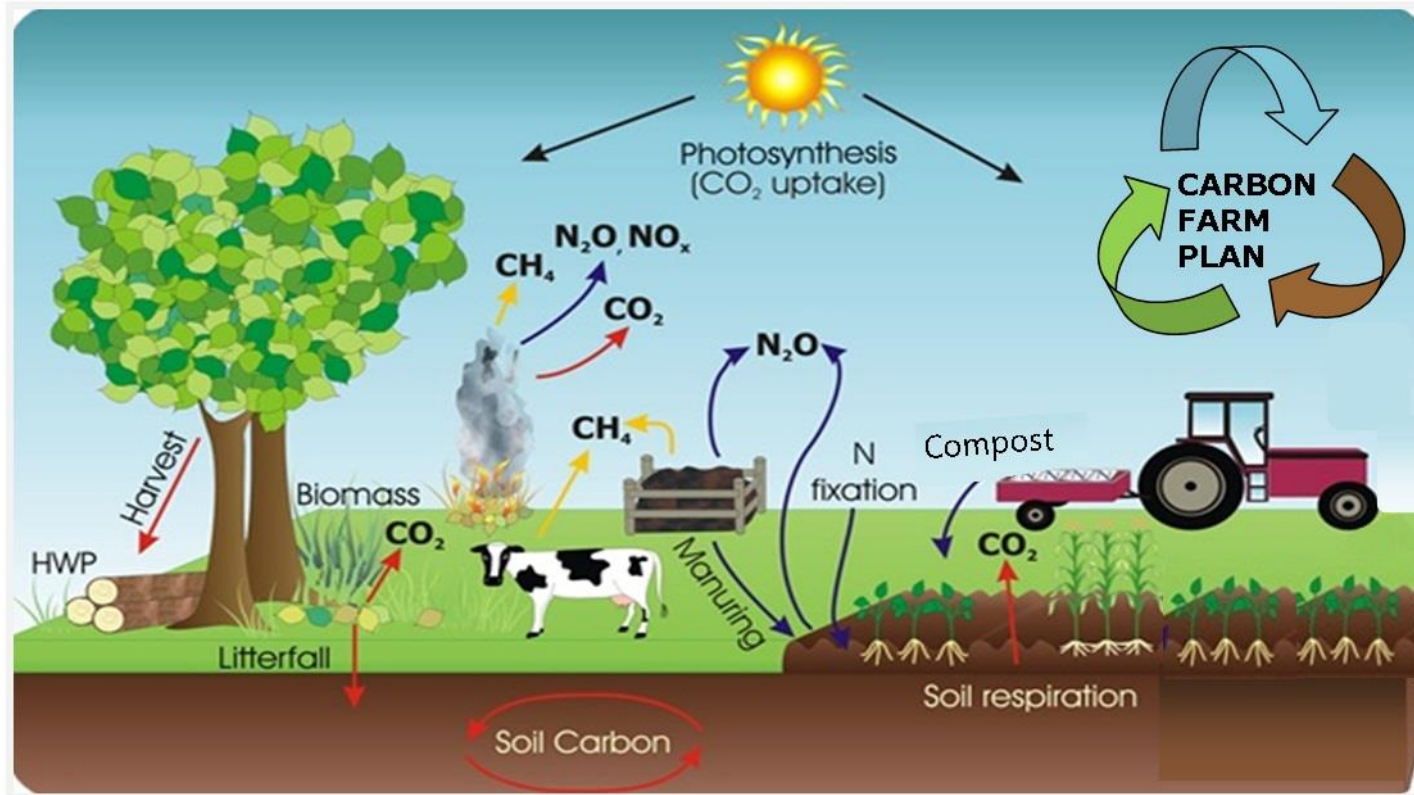


# Indirect Emissions: Stuff we buy

- Growth economy is not serving us well- opt out of GDP worship
- Individual strategies
  - Buy less stuff
  - Purchase recycled or reclaimed (used)
  - Repair/refurbish things instead of discarding and buying new
  - Pay attention to how goods are manufactured
    - Concrete and steel = greater emissions than sustainably grown wood (certified as sustainably grown -FSC -Forest Stewardship Council)



# Taking heat trapping gases from Atmosphere



{Photo credit: Marin Carbon Project

- Hero Farmers: Silvopasture (#9), Regenerative Agriculture (#11), Composting (#60) and Fertilizer-nutrient management (#65)
- Native landscapes for residence, business, condo associations, HOAs
- **Parish landscape, garden** can play a significant role
- Reforestation/Afforestation (#15) projects in community

Project Drawdown, Union of Concerned Scientists – *Cooler, Smarter*

# Influencing Government

- Calling
- Writing
- Emailing
- Marching

Scrutiny/hold accountable

Vote



Union of Concerned Scientists – *Cooler, Smarter*  
Bill Gates - *How to Avoid a Climate Disaster*

7/18/2023

1. Global cooperation (Paris Agreement, COP 26)
2. Industrial Policy (Inflation Reduction act)
3. National price on carbon
4. Transformative and sustainable Farm Bill (2023)
  - Stop subsidies to monoculture crops/processed food
  - Pay farmers to store carbon
  - Nutritious plant-rich diet

Union of Concerned Scientists – *Solutions; Cooler, Smarter*. Bill Gates - *How to Avoid a Climate Disaster*

# Federal Government



Citizens Climate Lobby 2018

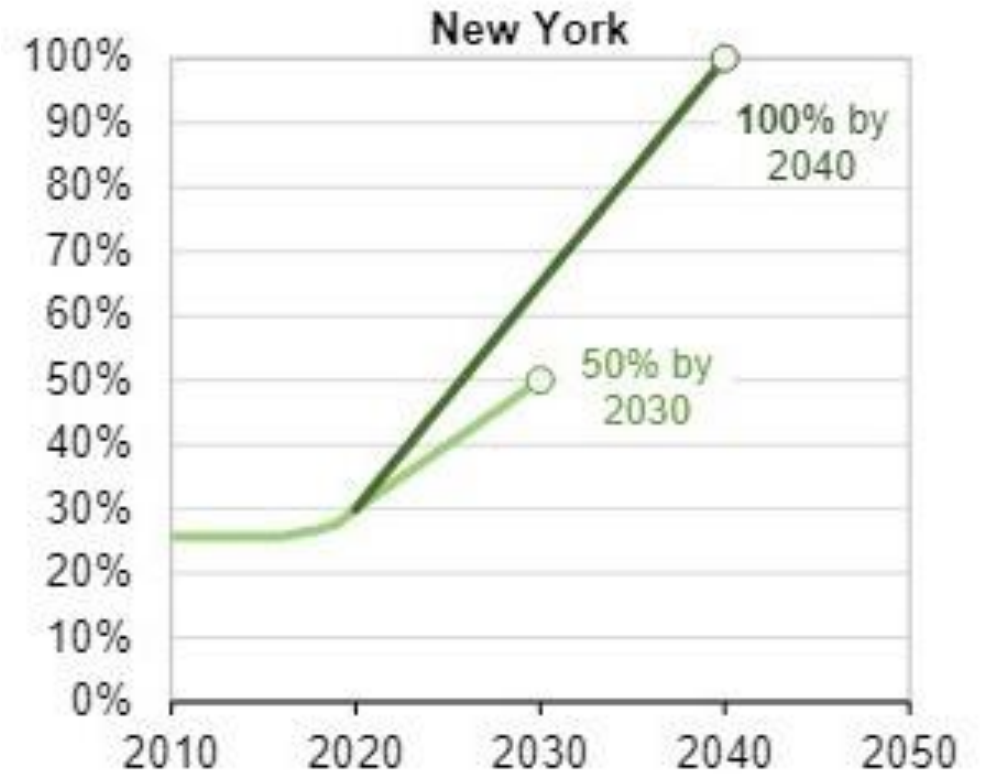
# States regulate utilities

1. Low carbon electricity portfolio standard needed: 70-100% by 2030
2. Reduce electrical consumption
  - Audits, discounts on energy efficient equipment
3. Favorable rules for distributed (roof top) solar especially community solar (Inflation Reduction Act)

**In NY we must monitor progress, hold officials accountable**

Union of Concerned Scientists – *Solutions; Cooler, Smarter*  
Bill Gates - *How to Avoid a Climate Disaster*

**Portfolio targets, based on % of retail electrical sales**



U.S. Energy Information Administration, based on states' renewable portfolio standards

# Local Government (Front Lines)

- Zero Energy Building Codes
  - New construction & renovations/retrofit
  - Economics & social justice
- Transportation
  - Mixed housing, commercial and business planning
  - All electric public transit\*
  - EV charging availability (Inflation Reduction Act)\*
- Rules and tax incentives for native landscapes and reforestation

\*All powered by non-emitting sources of electrical power



Union of Concerned Scientists- *Cooler, Smarter*. Bill Gates *How to Avoid a Climate Disaster*. Habitat for Humanity.

City Hall, Long Beach

(Anthony 22 with permission Wikipedia)



# There is hope, but we must act

- It's bad
- Its us
- There are solutions .....
- but they won't work unless we act boldly and urgently

We can and must make a difference

- Rich nations: stop emissions within decade
- Restore our soils and full photosynthesis
- In our own realms (home, business, parish)
- Influence others, community **by example**
- Hold governments accountable