Why Carbon Fee & Dividend?

Our Agenda

- A brief overview of the climate crisis--the scope and urgency of the problem
- An overview of various policy approaches along with strengths and drawbacks with each.
- Why a carbon fee & dividend should be a key part of any legislative package.
- What you can do--actions individuals, churches, and Presbyteries can take.

PEC Conference, August 15, 2021
Linda Racine, Curtis Baysinger, Tom Matte on behalf of Presbyterians for Carbon Dividends
Two linked global health crises:
Climate change and air pollution
Climate change and GHG emissions impact health through many pathways

Global effects of GHG emissions

Local effects from other air pollutants (e.g. PM2.5)

Social factors: e.g. poverty
Harm from head to toe in young and old

Air pollution has adverse effects on health

**Respiratory system**
- Airway irritation (coughing, wheezing), inflammation
- Asthma, COPD, lung cancer
- Acute lower respiratory infection and pneumonia
- Decreased lung function and lung growth

**Cardiovascular system**
- Exacerbation of heart disease
- Heart attacks, strokes

**Other**
- Cataracts
- Low birth weight
- Nasopharyngeal and laryngeal cancer
- Decreased cognitive ability

Source: https://www.inspirecleanair.org/take-action#for-clinicians
Health impacts of air pollution and heat exposure: United States

- Air pollution causes ~ 60000 deaths/year*
- High temperature causes ~ 2400 deaths/year*
- Estimates vary and science is evolving
- Deaths are the tip of the iceberg

Health impacts of heat exposure: New York City - some are far more vulnerable

NYC neighborhoods at greatest risk:
Social disadvantage
• Receiving public assistance (%)
• Non-Hispanic, black population (%)
Physical environment
• Higher surface temp
• Less vegetative cover

Household risk factors include energy insecurity and lack of access to air conditioning

Health impacts of air pollution: NYC. Front line communities include those most vulnerable to truck and bus pollution.

PM2.5 levels from trucks and buses are 70% higher in high poverty neighborhoods relative to low poverty neighborhoods.

Health impacts of air pollution and heat exposure: Global

- **Air pollution:** ~ 6.7 million deaths
- ~6.3 million of these in low-middle-income countries where air is much more polluted
- Air pollution death rate in least developed countries > 5x greater than US rate
- **Heat:** ~300,000 deaths/year
- >95% in poorest countries
- The effects of drought, food insecurity, and conflict are greatest in poorest parts of the world

Growing air pollution inequality

![Graph showing PM2.5 levels over time in different regions](image)

- **PM2.5 US,** declining from clean air regulations
- **PM2.5**, low-middle income countries
Energy consumption supports health – up to a point. It needs to shrink here and grow in developing countries.
As energy use grows where most needed, the carbon intensity of energy production must go down rapidly everywhere.
Two recent reports physical science realities:

- It is unequivocal that human influence has warmed the atmosphere, ocean and land.
- The scale of recent changes ...... are unprecedented over many centuries to many thousands of years.
- Climate change is already affecting every inhabited region across the globe.
- How much we limit future warming depends not only on when we get to net zero emissions, but how fast we reduce emissions in the near term.
- Reducing energy consumption and demand in high-income countries will increase chances of success and limit the need for solutions that are unproven and have other risks.
To reduce emissions at the speed and scale necessary requires *systemic change*.

We need policy support.
Solution Requirements:

● Socially just

● Fast and evidence-based

● Global effects
What can government do?

What can we do?
Generally, Government has 3 ways to change behavior

1. Investments/Spending
   Research and development
   Fund infrastructure projects
   Incentives for desirable behavior

2. Laws - Congress
   Rules, regulations - Agencies

3. Taxation:
   Tax undesirable behavior
Investments / Spending

Research & Development

- Transportation decarbonization
- Energy storage
- Carbon capture
- Methane capture from agriculture
Investments/Spending

Supporting Regenerative Agriculture

● Healthy soil
● Healthy people
● Healthy planet!
Investments / Spending

Infrastructure Support

• Monies for mass transit systems, electric vehicle plug-ins

• Grid infrastructure
Investments/Spending

Front line Community Infrastructure Support

Resilience of coastal cities to combat to sea rise

Direct infrastructure hardening to minority communities

Plug oil wells and coal mines that leak methane
Human Infrastructure Support

Civilian Climate Corps

Improve health access minority communities

Access to clean water
Investments/Spending

Incentives

- Tax credits for making your home or building more energy efficient

- Energy sources that emit no CO₂
Investments/Spending

Strengths:

• Government R&D funds new technologies that industry won’t

• Levels playing field for vulnerable groups and communities

• Allows politicians to strike win-wins
Investments/Spending

Weaknesses:

Many do not directly address CO$_2$ emissions

How do we fund them?

• Can have big price tags
• Can be difficult to gain bi-partisan support

Government not always good at choosing the path to follow

• Specifically which technologies to scale up
Laws/Regulations / Standards

Banning or controlling levels of certain pollutants - Compliance with energy standards, e.g. Clean Energy Standards
Regulations

Strengths

- Target vulnerable populations
- Huge health care benefits
- End point is easy to measure
Regulations

Weaknesses:

- Can take time to develop & implement
- Require enforcement, oversight (can be costly)
- Create great incentives for business to spend lots of money in Congress trying to warp the markets
- Vulnerable to:
  - Changes in administration
  - Legal challenges
Emissions Cap & Trade

Emissions caps set, then governments award or auction allowances
Emissions Cap & Trade

Strengths

- Hides the tax from the public
- Easier political solution
- Theoretically, you know exactly much CO$_2$ you’ll stop
Challenges

• Complicated to set up and run
• Companies can “game the system”
  • Europe’s system has not reduced CO₂ as expected
• If not designed well, companies can continue to pollute in frontline and fenceline communities
• CO₂ knows no boundaries - International treaties hard to negotiate
Another strategy....

Implement a Carbon Fee

With:

• a Dividend
• a Carbon Border Adjustment
Why a Carbon Fee?

- The price of fossil fuel in our economy is artificially low.
- When something costs more, people buy less of it.
- As fossil fuels becomes more expensive, there’s an incentive for businesses and consumers to **conserve, innovate, find cleaner choices**.
How does it work?

Charge a fee on fossil fuels at the source (well, mine, port)

Return net revenue to households as a dividend
Carbon Fee
- An increasing fee is collected on every ton of CO$_2$ generated from fossil fuels.
- As these fuels become more expensive, consumers and business choose cheaper, cleaner energy sources.

Dividend
- Revenue is rebated as a regular cash payment to all Americans to offset increased energy costs.
- More than two-thirds of Americans will receive more in dividends than they pay in higher costs, especially those who need that benefit the most.
Carbon Border Adjustment

Protect U.S. manufacturers and jobs

- Imported goods pay a border carbon adjustment
- Goods exported from the United States receive a refund

Reduces incentive for US to move dirty industry overseas

Provides an incentive for other countries to reduce emissions
Carbon Border Adjustment

Other Countries have to be a part of the Solution

Data: Global Carbon Project; Chart: Connor Rothschild/Axios
What are the advantages?

- **It’s socially just.** The dividend protects the most vulnerable from increased energy costs and boosts local economies.

- **It's FAST**
  - Relatively quick and simple to implement
  - Will quickly start driving down carbon emissions and improve air quality and people’s health
  - It has economy-wide impact--not just the energy sector
  - It spurs needed innovation. It is a solutions multiplier.

- **It can have a global impact**
What are the advantages?

- **It reduces consumption**
  - Everyone--business and consumer-- has incentive to use less

- **The dividend can be structured in a variety of ways:**
  - 100% returned to households
  - Means-tested so mid- and low-income receive dividend; 25-30% of revenue invested in front-line communities, coal communities, infrastructure, etc.

- **It works well with the regulations and investments**
  that will also be necessary as part of a comprehensive climate policy strategy.
Carbon Fee & Dividend

Supported by:
● 3500+ Economists
● The United Nations
● The Business Roundtable & other businesses
● Many faith communities
It’s not the ONLY thing we need to do, but data suggests it is an essential part of any climate package.
Business as usual

Temperature increase by 2100: +3.6°C (+6.5°F)

- Global Sources of Primary Energy
- Greenhouse Gas Net Emissions

Energy Supply:
- Coal: status quo
- Oil: status quo
- Natural Gas: status quo
- Bioenergy: status quo
- Renewables: status quo
- Nuclear: status quo
- New Zero-Carbon: status quo

Transport:
- Energy Efficiency: status quo
- Electrification: status quo

Land and Industry Emissions:
- Deforestation: status quo
- Methane & Other: status quo

Buildings and Industry:
- Energy Efficiency: status quo
- Electrification: status quo

Growth:
- Population: status quo
- Economic Growth: status quo

Carbon Removal:
- Afforestation: status quo
- Technological: status quo

En-ROADS Climate Ambassador Training
Plant new forest and restore old forests on 99% of available land.
Electrify the transportation sector

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- Greenhouse Gas Net Emissions

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- Buildings and Industry:
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- Carbon Removal:
  - Afforestation
  - Technological

- Growth:
  - Population
  - Economic Growth

Temperature Increase by 2100:
+3.5°C
+6.4°F
Change energy supply AND electrify transport & building sectors; Improve energy efficiency

It is likely each of these would require a separate legislative or regulatory policy to achieve. One sector at a time. What if there were a single policy that achieves similar results?
What if you simply put a fee on carbon?
Carbon fee is a “solutions multiplier” – creating an incentive to improve energy efficiency and electrification in transport, buildings, & industry.
Spurs innovation (like Carbon Capture & Sequestration)
Restore our forests and plant new forests; Green our living spaces
Improve our agriculture techniques; Sequester carbon in the soil

Eat more vegetables
A carbon fee can:

- Quickly drive down emissions across 80% of our economy
- Support and accelerate all the other things that need to happen
What questions do you have?
What’s the current landscape?
Senator Approves Growing Climate Solutions Act

Act will help farmers, ranchers and forest landowners to implement climate-friendly practices.

June 24, 2021 | Arlington, VA

Introduced by Senate Agriculture Committee Chairwoman Debbie Stabenow, D-MI., and Sen. Mike Braun, R-IN

Co-sponsored by 50+ Senators; Passed 92-8
Bipartisan Support of Infrastructure Package

Climate-related provisions:

- $73 billion-electric grid and power infrastructure
- $66 billion-passenger and freight rail
- $55 billion-water systems and infrastructure
- $50 billion-Western water storage
- $39 billion-public transit
- $21 billion-environmental remediation projects
- $15 billion-electric vehicles

The Senate voted 69-30
A number of climate bills

Only 1 (MARKET CHOICE) has a Republican sponsor


Sen. Durbin: America's Clean Future Fund Act of 2021


Rep. Brian Fitzpatrick: Modernizing America with Rebuilding to Kick-start the Economy of the Twenty-first Century with a Historic Infrastructure-Centered Expansion (MARKET CHOICE) Act


Sens. Whitehouse-Schatz: Save Our Future Act 2021

THRIVE ACT
THRIVE Act

Transform, Heal, and Renew by Investing in a Vibrant Economy Act

- **Honoring frontline leadership.** The bill creates a THRIVE Board of representatives from impacted communities, unions and Indigenous Nations to guide the $1 trillion per year in new investments.
- **Economy-wide investments** to take on injustice, pollution, and joblessness.
- **At least 50% of investments for frontline communities.**
- **Respecting Indigenous sovereignty.**
- **Strong labor, equity, and environmental standards.**
Save Our Futures Act
Carbon Fee and Dividend

Addresses a number of Environmental Justice concerns

Revenue

- 75%--regular dividends to low/mid income household
- 25% directed to:
  - Adversely affected communities
  - Fossil fuel worker communities
  - Assistance to states with climate mitigation

CO2 eq

Puts fee on non-CO2 GHGs (fluorinated gases and process emissions)
Environmental Justice Proposals

A partial list

Transform the current utility system--transition to public ownership

Invest in large-scale public works projects that promote energy efficiency and develop community-based clean energy infrastructure

Create pathways for displaced fossil fuel workers to transition into the clean energy economy

Advance zero energy homes and buildings to curb emissions from the built environment.

Shift investments to public transit and away from highway capacity expansion projects for single-occupancy vehicles

End corporate agricultural consolidations and restore localized food systems

End new fossil fuel exploration and extraction immediately; Cease the operation of currently-producing fossil fuel infrastructure adjacent to communities experiencing present-day and generational impacts to human and environmental health
Budget Reconciliation

What the budget deal means for climate policy

Ely Sheehy, Emma Dumain, George Colvin | 07/15/2021 16:09 PM EST

President Biden and Senate Majority Leader Chuck Schumer (D-N.Y.) at the Capitol yesterday. Florian Chung/E&E News
Many Climate Advocates are contacting their senators

- Interfaith Power & Light
- Environmental Justice groups
- American Sustainable Business Council
- Citizens’ Climate Lobby
What we can do....
What is PC (USA)’s position?
PCUSA & Climate Change

The General Assembly has been advocating for decades. In 2018, it approved two policies:

1. **“The Earth Is the Lord’s”** that encourages “the whole church to raise a prophetic voice regarding the urgency of healing the climate of the earth, our home and God’s gift for the future of all life, human and nonhuman” as pastors take on the moral mantle of preaching and teaching while congregations and Presbyterians lead by our example of making energy choices with integrity.
PCUSA & Climate Change

The General Assembly has been advocating for decades. In 2018, it approved two policies:

2. “On Supporting Carbon Pricing” that encourages the church to “express its profound concern about the destructive effects of climate change on all God’s creation, including a disproportionate impact on those living in poverty and in the least developed countries” while advocating for the creation of carbon pricing that is fair and just especially for those in vulnerable populations.
About the dividend...

This is essential, for together with our concern for the planet goes our concern for the most vulnerable people living on it. This bill should not result in economically poor people in the U.S. getting poorer.
In Support of the Energy Innovation and Carbon Dividend Act of 2019 (HR 763)

In June 2018, the 223rd General Assembly of the Presbyterian Church (U.S.A.) “expressed profound concern about the destructive effects of climate change on all God’s creation, including a disproportionate impact on those living in poverty and in the least developed countries, the elderly and children, and those least responsible for the emissions of greenhouse gases.” The Assembly went on to express its conviction in a “moral mandate for humanity to shift to a sustainable energy regime” and urged the implementation of “national and international policies that create a consistent, rational, and escalating price for emissions of CO2 and other greenhouse gases, which will reduce consumption and support investment in sustainable alternative energy sources.”
The Presbyterian Church (U.S.A.) applauds this bipartisan effort to care for a suffering creation and supports passage of this bill.

Office of Public Witness, February 12, 2018
Tell Congress to Support H.R. 2307: The Energy Innovation and Carbon Dividend Act

This bill will help reduce America's carbon pollution to net zero by 2050. It puts a fee on carbon pollution, creating a level playing field for clean energy. The money collected from fossil fuel companies goes to Americans in the form of a monthly 'carbon cash back' payment so that everyone can afford the transition.

Support the Energy Innovation & Carbon Dividend Act
Add your name to this letter...

To sign, scan the QR Code above or go to https://forms.gle/PMPFBYxctUwrWY2j9

The Honorable Debbie Stabenow  
United States Senate  
731 Hart Senate Office Building  
Washington, D.C. 20510-2204Washington, DC 20515

Dear Senator Stabenow,

Thank you for all you do in addressing the many challenges our country is facing: the pandemic, economic insecurity, racial and social injustice, severe wildfires and hurricanes that are devastating communities...the list goes on. Today we are writing to express our deep concern about climate change, as it is a threat multiplier to all these challenges.

As members of the Presbyterian Church (USA), we take seriously our responsibility as stewards of creation. You may be aware that in June 2018, our denomination’s General Assembly overwhelmingly passed an overture expressing “profound concern about the destructive effects of climate change on all God’s creation, including a disproportionate impact on those living in poverty and in the least developed countries, the elderly and children, and those least responsible for the emissions of greenhouse gases.”

We share that profound concern, as we Imagine you do as well, and we urge you to take bold bipartisan action. Consistent with our General Assembly’s recommendation, we particularly support legislation that includes a carbon fee and dividend like that found in the Energy Innovation and Carbon Dividend Act (HR 763). This approach will quickly reduce greenhouse gas emissions and facilitate an economically just, compassionate transition away from fossil fuels to a clean energy economy.

We pray for urgent action on this critical issue.  
Sincerely,
Pastor calling during Earth Day Service
Hello, my name is ________________, I live in [State/District], and I’m calling about Climate Change.

This is an important issue to me, and I encourage you to take bipartisan action.

*I particularly support policy that includes a carbon fee & dividend as part of the solution.*
What else can you do?

Advocate for CFD **AND** complementary policies to advance equity and health.

*Here are a few of my favorites...*
For example: transportation

- GHG emissions: more than 1/3 of US total
- Cost burden: Largest household expense after housing - 32% of income for households in lowest income quintile. Greater burden in rural households
- Lack of access to car: 14% of households led by people of color vs 6% of white households
- Transportation spending, zoning, and GHG mitigation subsidies, are unfair to low-income, non-car owning households and limit access to services and opportunity
The result? US Transit is safe, but streets designed for fast driving and larger vehicles are killing pedestrians.

(Sprawling cities in the south and west are most dangerous.)

45% increase in people struck and killed while walking
The last four years were the most deadly in three decades

(Smart Growth America 2021)
Transportation policies that advance just climate action, health and safety
Smart zero-emission vehicle policy for all

Electrify Public Transit

Strengthen charging infrastructure

Support transition to zero-emissions trucks

Charge: Smart zero-emission vehicle policy for all
Give public transit and highways equal funding

undoing the arbitrary 80/20 bias towards federal subsidies for highway construction over transit
Climate change is complex, there is no single or simple fix. Solutions must include measures that are:

- Socially just
- Fast and evidence-based
- Global effects
Thank You!