Robert Byron, MD, MPH, FACP
Chief Information Officer
Bighorn Valley Health Center
Carbon Pricing: A Primer

Robert Byron, MD, MPH, FACP
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Citizens’ Climate Lobby
Why Price Carbon?

- Provides price incentive/market-based
- Rising private investment in clean energy, falling investment in fossil fuels
- Consumers change to energy efficient products and lifestyle
Carbon Pricing Initiatives

Tally of carbon pricing initiatives

- ETS-implemented or scheduled for implementation
- Carbon tax implemented or scheduled for implementation
- ETS or carbon tax under consideration
- ETS and carbon tax implemented or scheduled
- Carbon tax implemented or scheduled, ETS under consideration


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Carbon Pricing Benefits

• Places burden on those responsible
• Predictable
• Encourages or “incentivizes”: 1) private investment in clean energy and energy efficiency, 2) decreased investments in fossil fuels, and 3) consumer change to more energy efficient products and lifestyles.
• Generate government revenue
• Market-based
What is Carbon Pricing?

• Market-based strategy for lowering emissions
• Puts an actual monetary value on carbon emissions that contribute to air pollution and, thus, climate damage
Methods of Carbon Pricing

1. Cap-and-Trade (=ETS)
2. Carbon Tax/Fee
3. Hybrid systems
Cap-and-Trade

- Statutory or regulatory “cap” on emissions
- Emission credits allotted (free) or auctioned (sold)
- Emitters can buy or sell emissions credits up to the cap
- Emissions cap declines over time, thus fewer emissions
- Cap on emissions + trading emissions allowances indirectly prices carbon
- Government revenue generated from auctioning emission credits.

Carbon Fee/Tax

- Fee based on CO2 equivalents or carbon content of fuel
- Carbon-based fuels/products pay fee at time of extraction or entry into country (border-tax adjustment)
- Costs of fee passed to consumers in higher costs of products
- Money collected returned to citizens as direct dividend, payroll tax reductions, or other mechanisms.
Similarities

- Explicit costs, either carbon fee or allowances
- Long term incentives for lowest cost carbon emissions
- Both can include just CO2, or other GHG
- Both can stimulate economy
- Both can be progressive
Differences

- Cap-and-Trade ensures a fixed level of emissions, Carbon tax does not
- Carbon tax may result in greater than anticipated reductions
- Cap-and-Trade does not encourage emissions reductions below the level of the cap
Precedence

- Acid Rain Program—1990: Sulfur dioxide allowances
- RGGI—2009: 9 NE and mid-Atlantic states
- California Cap-and-Trade—2012
- British Columbia—2008
- China: pilot emissions trading programs in several provinces.
British Columbia

- $10/ton carbon tax increased $5/ton/yr to $30/ton in 2012
- Most electricity already from renewable sources
- -17% per capita fuel consumption
- 5-15% emissions reduction first five years
- No evidence of negative impacts on low-income households or BC economy
Equity

- Dividends/tax credits for low income households
- REMI: 60% of US households benefit
- Local effects of carbon pollution often greatest on disadvantaged communities
- Funds for transitioning dispossessed workers with training, retirement benefits and local diversification
- Example: California: thru 2015 $912 million from cap-and-trade reinvested, 51% in disadvantaged communities
References: Carbon Pricing


Climate Advocacy Organizations

1. Citizens Climate Lobby: citizensclimatelobby.org
2. Health Care Without Harm: https://noharm.org
3. Medical Society Consortium on Climate and Health: https://medsocietiesforclimatehealth.org
4. US Climate and Health Alliance: http://usclimateandhealthalliance.org
Contact Info

• Robert Byron, MD:
  • rgbyon@gmail.com

• Lori Byron, MD, Chair, CCL Climate & Health Team
  • lori.byron@gmail.com