

**Overview of the U.S. Energy Innovation and Carbon Dividend Act of 2019
(H.R. 763)
Fairfax County Board of Supervisors' Legislative Committee
Updated for November 26, 2019**

Provisions of H.R. 763

- H.R. 763 seeks to use a carbon fee or tax to discourage the use of fossil fuels, encourage the adoption of clean energy technologies and reduce greenhouse gas (GHG) emissions.
- H.R. 763 would establish emission reduction targets in two phases: a five percent reduction from 2016 emission levels per year in the first phase (2025-2034) and a 2.5 percent reduction from 2016 emission levels per year in the second phase (2035-2050).
- No later than 10 years following implementation of H.R. 763, a study would be commissioned to determine if H.R. 763 is meeting these emission reduction targets.

Carbon Fee

- The carbon fee would be levied by producers or importers on the use, sale or transfer of "covered" fuels — crude oil, coal and natural gas — at the source, as well as on all major derivatives (e.g., petroleum) or products (e.g., cement, steel and glass).
- The carbon fee would begin at \$15 per metric ton of CO₂-e (carbon dioxide equivalent) and would increase each year by \$10, and by \$15 per metric ton if the previous year's emission targets are not met.
- Additional annual adjustments to the rate increase could occur in cases of inflation.
- H.R. 763 would also establish a fee structure for fluorinated GHGs typically associated with refrigerants or propellants.

Distribution of Funds Collected

- The monies collected from producers and importers would be placed into a Carbon Dividend Trust Fund, which would be distributed to citizens and lawful residents of the U.S. through monthly carbon dividend payments ("pro-rata shares"), but citizens residing outside of the U.S. would be ineligible for shares (the program's administrative costs would also be paid from the Trust Fund).
- Eligible adults would be entitled to one pro-rata share per month, while eligible children (individuals under 19 years old) would be entitled to one-half share (dividends would be counted as taxable income and reported to the IRS).

Other Provisions

- In addition, exemptions and refunds would be made available to the agricultural sector and the Armed Forces.
- In addition to the carbon fees imposed within the U.S., H.R. 763 would institute a carbon border fee adjustment to capture fossil fuel intensive products entering the U.S. (imports to U.S. territories would not be subject to border fees).
- Vehicle fuels taxed under H.R. 763 would no longer be subject to Clean Air Act restrictions – a fossil fuel that would be taxed under H.R. 763 would not need to be reformulated to make it burn cleaner, but new corporate average fuel economy (CAFE) standards could be promulgated to help drive engine efficiency.

- H.R. 763 proposes a ten-year moratorium on the EPA’s ability to reduce carbon pollution from power plants.
- State regulations would not be preempted or superseded by H.R. 763.

Potential Impacts of H.R. 763

- Fairfax County has long supported efforts to reduce the County’s GHG emissions and operational demand for energy through efficiency, conservation, renewable energy, and education. The Board recently reaffirmed its commitment to such efforts in 2019 and numerous initiatives are underway to address climate change.
- H.R. 763 proposes a market solution to reducing GHG emissions by providing a steadily-intensifying market signal to producers and importers about the cost of carbon emissions.
- Though H.R. 763 may have a positive impact on the environment, such a substantial market transformation effort would also likely trigger complex economic and social impacts at the national, state, and local levels, which are difficult to predict and would vary per household based on commuting habits and other factors.
- Few studies analyze H.R. 763, but there have been many studies of a carbon tax concept as a tool to address climate change and British Columbia’s implementation of a carbon tax also provides useful insight.

Congressional Budget Office (CBO) Analysis

- Though the CBO has not done an analysis of H.R. 763, the agency did address the potential effects of a carbon tax generally on the economy and the environment in a May 2013 report.
- According to the CBO, a carbon tax would increase the prices of fossil fuels in direct proportion to their carbon content – higher fuel prices would raise production costs and ultimately drive up prices for goods and services throughout the economy.
- Consumers would likely see the biggest price increases for items such as gasoline and electricity – particularly in areas where electricity is generated from coal, which produces the most CO₂ emissions per unit of power generated.
- The potential impacts of H.R. 763 on different socioeconomic groups, particularly low-income populations, are of significant concern – CBO’s analysis finds that the additional costs of goods and services will impact low-income households, because low-income households typically consume more emission-intensive goods.
- Because producers and importers can be expected to attempt to pass the carbon fee through to the ultimate consumer, the low-income population may face undue economic burdens from increasing carbon fees.

Ummel Analysis

- A 2016 report by Kevin Ummel of the International Institute for System Analysis (which was prepared for the Citizens Climate Lobby (CCL), an advocate for H.R. 763) examined the expected total (direct and indirect) economic impact of a carbon fee and dividend approach on end-users.
- The Ummel report is a static analysis predicated on a carbon fee of \$15 per ton (the initial rate in H.R. 763, without taking into account proposed annual increases of \$10, which could lead to carbon fees of \$100 per ton by 2030).

- The report concludes that a carbon fee would yield a positive net financial benefit on 53 percent of households nationwide (58 percent of individuals). An additional 19 percent of households would incur a “minor loss,” defined as a net financial loss that does not exceed 0.2 percent of pre-tax household income.
- However, the report also surmises that households in suburban areas are likely to fare worse under such a plan (reflecting higher incomes/consumption and carbon footprints). It also acknowledges that 10 percent or more of households living below the Federal Poverty Level will not benefit from the carbon policy.

Rhodium Group Analysis

- In July 2018, the research firm Rhodium Group (in a report for Columbia University's School of International and Public Affairs, Center on Global Energy Policy) released a report which focuses on the impacts of a carbon tax on energy costs and emissions.
- According to the Rhodium report, a carbon tax would increase the costs of direct energy expenditures (e.g., gasoline, utility bills for both individuals and businesses), with the impact depending on the specific rate per ton – a carbon fee of \$14 per ton (slightly below the first-year \$15 per ton rate proposed in H.R. 763), would increase direct energy expenditures by six percent. Per-ton rates of \$50 – likely within four years of enactment – would increase direct energy expenditures by 21 percent. A per-ton rate of \$73 would increase direct energy expenditures by 34 percent.
- Though a carbon fee is expected to be a powerful tool for incentivizing power producers to shift generation resources from coal to natural gas and/or renewable energy, the Rhodium Group found that GHG emissions from sources other than power generation are more difficult to tackle with a fee, especially emissions from transportation, where petroleum is the primary fuel.

British Columbia Case Study: Lessons Learned

- In 2008, the Canadian province of British Columbia (BC) adopted a carbon tax on the purchase or use of fossil fuels, covering 70 percent of BC’s GHG emissions. The tax started at \$10/ton and reached a cap of \$30/ton in 2012. Until 2018, all revenue was returned to individuals and businesses through reductions in income taxes. BC also incorporated tax credits for lower-income individuals and families. Although individuals received a majority of the revenue in the first year of implementation (68 percent), by the seventh year, businesses were receiving 70 percent more of the revenue than individuals.
- BC recognized a need to revisit its carbon tax approach in order to meet its climate goals. In 2018, BC increased the annual tax rate by \$5/ton (that increase is expected to continue until the tax reaches a cap of \$50/ton in 2021). BC also restructured the allocation of carbon tax revenue to fund tax credits for low- to moderate-income individuals and families, an incentive program for large industrial emitters, and green initiatives, such as BC’s Clean Energy Fund. Information is not yet available on how revenue was allocated across these three areas in 2018.
- The tax has not had a positive impact on overall GHG emissions in BC. From 2009 to 2017, overall GHG emissions in BC increased by 4.4 percent. Notably, over

roughly the same period (2005-2015), overall GHG emissions in Fairfax County dropped 9 percent without the implementation of such a tax.

- Some experts have suggested that while a carbon tax is intended to raise the cost of GHG emissions, refunding those costs defeats that outcome, because refunds reduce or eliminate the disincentive to use fossil fuels. Such provisions of BC's carbon tax framework were eliminated in 2018.
- In the absence of notable emissions reductions, some experts have concluded that carbon taxes need to be bolstered by supplemental policies, such as clean energy mandates and pollution regulations, preferably funded by carbon tax revenues.

Considerations for Fairfax County

- The cost of a carbon tax would not be equitably distributed among households. According to the CBO, the additional costs of goods and services resulting from a carbon tax will impact low-income households, because low-income households typically consume more emission-intensive goods.
- Carbon dividend payments likely will not keep pace with the rising prices of carbon-intensive fuels, goods and services if adequate and equitable alternatives are not made available, especially to the most vulnerable populations such as low- to moderate-income households.
- For example, ten years after the carbon tax is implemented, the average individual in Fairfax County could be using 100 percent of their dividend (estimated to be about \$1,108 by County staff) to cover rising transportation costs, as average gasoline expenditures in the tenth year could be over \$1,100 higher than they would be without a carbon tax. In addition to transportation fuel, costs are expected to rise for electricity, natural gas, home heating fuels (such as propane or diesel), and for numerous other carbon-intensive byproducts, goods and services.
- Because transportation is a major source of GHG emissions both across the U.S. and in Fairfax County, the limited potential impact of H.R. 763 on transportation-related emissions is a serious shortcoming.
- According to the Metropolitan Washington Council of Government's most recent GHG inventory, in 2015, transportation and mobile sources contributed 43 percent of GHG emissions in Fairfax County. Transportation was the second-largest source of emissions after the building sector, where emissions from residential and commercial buildings accounted for 51 percent of the County's total GHG emissions.
- The impact to local governments is similarly unclear. For example, essential services that Fairfax County provides to residents (e.g., the Connector bus service) could be significantly impacted by a carbon fee.
- Additionally, nearly 95 percent of households and commercial entities in Fairfax County receive electricity from Dominion Energy, which has already largely shifted its generation resources from coal to natural gas. Dominion's customers continue to pay for this shift away from coal through "bill riders" or "rate adjustment clauses" that are added to the monthly utility bill. Imposing a carbon tax on top of these bill riders means that the County's Dominion customers will effectively pay twice for a transition to cleaner electricity generation.

- Methane, a byproduct of natural gas, is a more potent GHG than CO₂ over the short term. H.R. 763's focus on reducing coal-related emissions may not adequately address the impacts of methane in Fairfax County, and may have the effect of encouraging the use of methane over the first ten years of the tax.

Stakeholder Positions on Carbon Pricing

- The National Association of Counties (NACo) 2019-2020 American County Platform includes a Climate Change position that notes: "While NACo presently opposes cap and trade or carbon tax, NACo supports ongoing analysis and evaluation of these and all other tools that seek to reduce greenhouse gas (GHG) emissions, including their local economic and fiscal impacts."
- In July 2019, the U.S. Conference of Mayors passed a series of climate change-related resolutions, including one [drafted by the CCL] that "strongly urges the United States Congress to pass legislation that imposes a price on carbon emissions sufficient enough to reduce carbon emissions in line with ambitions detailed in the Paris Agreement on climate change."
- In May 2019, over 75 businesses participated in the Lawmaker Education & Advocacy Day (LEAD) on carbon pricing to advocate for a national carbon price as a central component of any legislative strategy to address climate change. Their message also noted that "a carbon price can be a powerful tool to drive down emissions, but other policy mechanisms are needed in order to reduce emissions at the pace and scale required to tackle climate change."

Congressional Action

- H.R. 763 was introduced on January 24, 2019, and was sent to the Ways and Means, Energy and Commerce, and Foreign Affairs Committees.
- H.R. 763 has 73 cosponsors (as of 11/15/2019), including Congressman Connolly.
- There are seven other carbon tax and cap and trade proposals that have been introduced during the current Congress: the Health Climate and Family Security Act of 2019 (S. 940 (Van Hollen)/H.R. 1960 (Beyer)); the American Opportunity Carbon Free Act of 2019 (S. 1128 (Whitehouse)); the Climate Action Rebate Act of 2019 (S. 2284 (Coons)/H.R. 4051 (Panetta)); the Stemming Warming and Augmenting Pay Act of 2019 (H.R. 4058 (Rooney)); the Raise Wages, Cut Carbon Act of 2019 (H.R. 3966 (Lipinski)); America Wins Act (H.R. 4142 (Larson)); and, the MARKET CHOICE Act (H.R. 4520 (Fitzpatrick)).
- Seven of the eight proposals (including H.R. 763) utilize a carbon tax as the carbon pricing mechanism, whereas the Healthy Climate and Family Security Act utilizes a cap and trade approach.
- No action has been taken on any of these bills, and there does not appear to be any potential for carbon pricing legislation to be enacted in this Congress, particularly before the 2020 Presidential election.
- However, since Democrats took the majority in the House of Representatives in 2019, dozens of hearings have been held on climate-related matters across the many committees that have jurisdiction in addressing the climate crisis.

- A bill that takes a broader approach to addressing climate change was recently introduced on November 21, 2019, by Representative McEachin. The *100% Clean Economy Act of 2019* (H.R. 5221) would set a nationwide goal of achieving a 100 percent clean energy economy by 2050, defined as net-zero climate pollution across all sectors of the United States' economy, and direct federal agencies to use all existing authorities to put the U.S. on a path toward meeting this goal.
 - The bill was introduced with over 150 original co-sponsors, including Representatives Beyer, Connolly, and Wexton.
 - The full text of the legislation is not yet available, but based on available information the bill appears to be a promising approach for combating climate change.

Staff Recommendation

Direct staff to strengthen language in the federal legislative program relating to climate change and innovative approaches to achieving substantial GHG reductions (see draft position below). Also direct staff to continue monitoring climate-related legislation and provide updates to the Board as needed.

Energy/Climate Change

Support **innovative approaches to address global climate change, including** incentives to increase research and development for emerging energy efficient and renewable technologies. **Also, support federal funding for state and local governments to address issues related to global climate change, including energy conservation, use of renewable energy sources (including waste to energy), green buildings and vehicles, reduced emissions, and greenhouse gases.**

For decades, Fairfax County has pursued initiatives such as Cool Counties to combat climate change. The County is currently accelerating and increasing local efforts through the development of a Community-wide Energy and Climate Action Plan in 2020. The federal government must also do its part by adopting a more aggressive strategy to address climate change, along with innovative policies and strategies including clean energy mandates and investments in green infrastructure and services. This strategy should take into account negative impacts on vulnerable populations and include community involvement and public education. **Also, support** funding and incentives to increase research and development for emerging energy efficient and renewable technologies, including extending the Solar Tax Credit (also known as an Investment Tax Credit) at the current value of 30 percent for both commercial and residential projects (the Solar Tax Credit will decrease to 26 percent in 2020, decrease to 22 percent in 2021, and decrease to zero for residential projects and 10 percent for commercial projects after 2021). *(Updates and reaffirms previous position.)*