Introduction

In August 2020, Citizens’ Climate Education (CCE) and Citizens’ Climate Lobby (CCL) released a working paper that projects how U.S. households will fare financially under the Energy Innovation and Carbon Dividend Act of 2019 (H.R.763). This document, entitled “The Impact of a Carbon Fee and Dividend Policy on the Finances of U.S. Households,” is a follow-up to a 2016 study that had preceded the drafting of legislation in 2018. The new study aligns with the legislative language of H.R.763, uses the most recent available economic and emissions data, and shows that two-thirds of Americans end up ahead.

H.R.763 imposes a fossil fuel Carbon Fee of $15/metric ton of CO\textsubscript{2}-
\textit{equivalent}, and then distributes all the net proceeds to eligible U.S. residents as monthly Carbon Dividends. Adults receive full shares and children receive half-shares. Because of enduring interest from members of Congress in how their constituents would fare under the policy, CCE and CCL commissioned independent researcher Kevin Ummel to conduct this analysis. Mr. Ummel, currently a Research Affiliate at the University of Pennsylvania and President of Greenspace Analytics, had previously authored the 2016 study.

The author modeled three scenarios for pass-through of Year 1 carbon fee costs to households: (1) 100 percent pass-through; (2) 70 percent pass-through, supported by some recent research; and (3) an intermediate 85 percent pass-through scenario. After consideration of statistical assumptions, the 3\textsuperscript{rd} case was selected as a most likely Baseline Scenario.\textsuperscript{1}

\textbf{Figure 1} shows how carbon dividends compare with carbon fee costs over five levels of consumption,\textsuperscript{2} based on average household spending and investment patterns. The chart clearly shows that dividends will exceed costs for the first three quintiles, showing that the plan is inherently progressive.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Each quintile represents 20 percent of the population, ranked by consumption. Carbon fee costs are passed down to consumers in the things we buy. Direct energy costs include fuels and electricity. Indirect energy costs are those embedded in all other purchases. Financial asset costs are carbon fees absorbed by businesses and passed back to investors. Carbon Dividends are after federal income tax.}
\end{figure}

\textsuperscript{1} This scenario reflects a midpoint between Scenarios 1 and 2, where 85 percent of the carbon fee is passed forward to consumers and 15 percent is borne by energy-using businesses and their investors. This pass-back cost component is shown in Figure 1 as “Financial Assets.”

\textsuperscript{2} The term consumption is considered a more accurate measure of economic well-being than income, correcting for households that spend significantly from sources not reported as income (IRA’s, reverse mortgages, etc.).
Study Highlights:

- In the Baseline Scenario, 61 percent of households and 68 percent of individuals enjoy a net financial gain where the carbon dividend exceeds the increased costs of goods and services (Figure 2). The poorest households benefit the most, even without complicated and costly means-testing, but simply as an inherent result of allocating dividends equally per person.
- Though high-income households generally experience a net loss in this study, the impact is small compared to income. Twelve percent of households in the top quintile actually come out ahead, and an additional 42 percent fall short by less than 0.2 percent of income (minor loss).
- Positive outcomes are quite evenly distributed between rural, suburban, small town, and urban communities (Figure 3). This study lays to rest the concern that rural residents would be unfairly burdened.
- With the inherent benefit of rewarding low carbon footprints, demographic groups who are most vulnerable to economic burdens do quite well under this policy (Figure 4).

Reducing Costs

How can households who experience a net loss reduce their carbon footprint, and thus their pollution costs? There are many avenues for this, from more efficient transportation and lighting to a whole range of consumer and investment choices that consider carbon footprint. This study did not account for any changes in behavior, but shows how they will become clear in the prices of competing goods and services.

Conclusion

This new study provides a useful look, in unprecedented detail, at how residents in every State and Congressional District fare financially. More than two-thirds of Americans receive more in dividends than they pay in higher costs, especially those who need that benefit the most.

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3 CCL can provide a custom handout showing these results for any selected State or Congressional District.