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H.R. 5457 Carbon Reduction and Tax Credit Act

Madhuri Lanka CMA
San Jose State University

Tax Policy Analysis
H.R. 5457 Carbon Reduction and Tax Credit Act
By: Madhuri Lanka, CMA, MST Student

H.R. 5457 (116th Congress), Carbon Reduction and Tax Credit Act, was introduced on December 17, 2019 by Congressman Sean Patrick Maloney (D-NY-18). The primary objective of this bill is to amend the Internal Revenue Code of 1986 by imposing an excise tax on the carbon content in various types of fuels, such as coal, oil, and natural gas, thereby encouraging people, businesses, and governments to contribute less to the global carbon footprint. In effect, the proposed bill seeks to mitigate the risks posed by the global climate change phenomenon with the least adverse impact on the economy, via penalizing the various industrial and consumer activities that use fuels with high carbon content.

Fossil fuels like coal, and natural gas, when burned, produce carbon dioxide (CO2) – a greenhouse gas, that directly contributes to so-called *global warming* and damages the health of humans and the environment. To a certain extent, this damage can be compensated for by taxing the carbon content of the fuels at any stage in the fuel's product cycle. The bill, if enacted, would impose a tax of $40 per ton of the carbon content in the fuel produced at a coal mine or an oil or gas well located in the United States or fuel that has entered the United States for consumption or warehousing. The bill requires the tax rate to be adjusted annually for the effect of inflation.

Currently, energy prices do not reflect the costs of greenhouse gas emissions (GHG) and the consumers of these fossil fuels do not pay for the damage caused by their contribution to carbon emissions. Instead, this cost is borne by people around the world and future generations. Imposing a carbon tax can help to address this negative externality by raising the price of energy consumption to reflect more of its social cost.

A carbon tax would be mostly borne by energy-intensive industries and low-income households. Lawmakers could use the resulting revenue from the carbon tax to offset the adverse impacts of carbon emissions, invest in clean energy, lower individual and corporate taxes, reduce the budget deficit, or for other uses. Or, as called for in H.R. 5457, the funds can be given to individuals in the form of a refundable tax credit of up to $1,000 per person available to most individuals.

Application of Principles of Good Tax Policy

This section analyzes H.R. 5457 using the twelve principles set out in the AICPA's *Guiding principles of good tax policy: A framework for evaluating tax proposals.*[1]

Criteria	Does the proposal satisfy the criteria? (explain)	Result (+/-/NA)
Equity and Fairness – Are similarly situated taxpayers taxed similarly? Consider the tax effect as a percentage of the taxpayer's income for different income levels of taxpayers.	There are two criteria in this principle to evaluate whether the tax proposal under consideration is equitable and fair. They are horizontal and vertical equities as described and applied next. Horizontal equity means that similarly situated taxpayers are taxed similarly. Tax incentives can cause similarly situated taxpayers to pay different amounts of tax. The issues of horizontal equity may arise if particular industries or economic sectors that predominantly emit non-CO2 GHG emissions (e.g., methane) are exempted from the carbon tax regime, while industries or sectors of comparable size are included based on their CO2 emissions. Then, there is differentiation in tax payment by similarly situated taxpayers. The bill also allows a refundable tax credit up to $1,000 for each individual taxpayer and each dependent of the taxpayer. The proposal does not meet horizontal equity because similarly situated taxpayers pay different amounts of tax though their income levels are the same because use of carbon fuels is not tied to income levels. For example, CO2 emissions result from a typical passenger vehicle. Also, the credit incentive is not tied to tax indirectly paid for carbon emissions as everyone gets the same credit amount. Thus, for both the tax and the credit, , horizontal equity is not met. Vertical equity means that taxpayers with a greater ability to pay should pay more tax than taxpayers with a lesser ability to pay. The impact of a carbon tax would differ among economic groups depending on the extent of	-

[1] American Institute of CPAs (AICPA), Tax Policy Concept Statement 1 – Guiding Principles of Good Tax Policy: A Framework for Evaluating Tax Proposals, 2017. Available at https://www.aicpa.org/advocacy/tax/downloadabledocuments/tax-policy-concept-statement-no-1-global.pdf.

	energy price changes and on regional energy production and consumption patterns. These factors are not related to ability to pay. For example, a high-income individual might rely primarily on solar energy and pay directly and indirectly much less carbon tax than a lower income individual. Also, a carbon tax would fall more heavily on workers and investors in carbon-intensive industries as well as on regions that depend heavily on carbon-intensive fuels, particularly coal. In this aspect, a carbon tax could then be viewed as regressive, meaning that the tax disproportionately impacts households with lower incomes. H.R. 5457 aims to address regressivity via a refundable tax credit of $1,000 to each individual taxpayer and each dependent of taxpayer. However, this tax credit is the same for all individuals, and phases out if exceeds ($157,000 of adjusted gross income ($315,000 for a married couple filing jointly)).	
Certainty – Does the rule clearly specify when the tax is owed and how the amount is determined? Are taxpayers likely to have confidence that they have applied the rule correctly.	H.R. 5457 clearly states the amount of tax and the tax base. The bill provides that a tax is imposed at $40 per ton of the carbon content of coal, gas and oil well located in United States for consumption, use or warehousing. However, the bill is not clear as to who the tax is directly imposed on with the obligation to pay it to the government and how frequently it is to be remitted. It also does not state how the carbon content is to be measured.	+/-
Convenience of payment – Does the rule result in tax being paid at a time that is convenient for the payor?	A carbon tax is a form of pollution tax. It levies a fee on the production, distribution or use of fossil fuels based on how much carbon their combustion emits. The government sets a price per ton on carbon, then translates it into a tax on electricity, gasoline, or oil. However, the carbon tax proposed by H.R. 5457 appears to be imposed at the time of mining or drilling or when imported into the U.S. This may not be convenient as the producer or importer has not yet realized revenue from its product. On the other hand, the producer or importer must consider this added cost which is one of the goals of the bill in aiming to reduce	+/-

	reliance on carbon fuels. Also, the bill does not state who pays and when which makes it difficult to fully consider this principle.	
Effective Tax Administration – Are the costs to administer and comply with this rule at minimum level for both the government and taxpayers?	The purpose of the proposal is that a well-designed tax could efficiently reduce the emissions that cause climate change, encourage innovations in cleaner technologies and, cut other pollutants. The resulting revenue could finance tax reductions, spending priorities or deficit-reduction policies that could offset the tax's distributional and economic burdens. Ideally, a carbon tax is levied at a point where the greatest share of emissions is included in the tax base and so, a minimum number of entities is subject to the tax with respect to compliance with this rule. However, IRS will have new administration costs such as writing rules on how this tax is imposed and collected, new tax forms and, new audit activity to be sure that the rules are followed. In addition, the IRS will have a significant workload to ensure that the $1,000 tax credit is properly administered.	+/-
Information Security – Will taxpayer information be protected from both unintended and improper disclosure?	Likely no effect. The bill does not introduce any new information reporting or compliance requirements that could potentially expose more taxpayer information to third parties.	NA
Simplicity - Can taxpayers understand the rule and comply with it correctly and in a cost-efficient manner?	One of the major issues with a carbon tax is that it is not simple. The carbon tax fails to meet the principal of simplicity because taxpayers need to maintain new recordkeeping and producers will likely devote a good amount of time to figuring out the tax and paying it over properly. Generally, any new tax will make the overall tax system more complex than before. Also, the new credit that applies to over 100 million individual taxpayers will add complexity in understanding how it interacts with other tax provisions.	-

Neutrality – Is the rule unlikely to change taxpayer behavior?	The carbon tax fails to meet the principal of neutrality because it will affect the business decisions of taxpayers. The intention of the proposed bill is to levy a tax on how much carbon the use, production and distribution of fossil fuel emits. So, the bill is likely to change the behavior of businesses and individual taxpayers to use fewer carbon-based fuels in their production or use at coal mines, gas and oil. Thus, the proposal does not meet the principle of neutrality although the sponsor's intent is to affect decision-making.	-
Economic growth and efficiency – Will the rule not unduly impede or reduce the productive capacity of the economy?	A carbon tax aims to make individuals and firms pay the full social cost of carbon pollution. In theory, the tax will reduce pollution and encourage more environmentally friendly alternatives. However, critics argue a tax on carbon will increase costs for business and reduce levels of investment and economic growth. The proposed bill has a neutral effect on this principle having both pros and cons. The pros such as encouraging firms and consumers to look for alternatives, e.g. solar power, raising revenue which can be spent on mitigating effects of pollution, reducing environmental costs associated with excess carbon pollution. The efforts to find energy alternatives can create jobs. The cons such as higher tax can discourage investment and economic growth. It may also cause some firms to shift production to countries without a carbon tax.	+/-
Transparency and Visibility – Will taxpayers know that the tax exists and how and when it is imposed upon them and others?	The carbon tax does not meet the principal of transparency and visibility. This is because the tax laws and rules are unnoticeable to taxpayers unless the government, IRS or EPA takes some effort to publicize the information regarding the carbon tax added to the price of fuels that the producers or importers use, produce and distribute in gas, oil and coal mines. Consumers are unlikely to realize why the prices of certain fuels increased unless they are provided with the information about carbon tax and the refundable tax credit they will be getting. It is crucial to highlight such information especially on tax returns so that	-

	the taxpayers understand the increases in credit amounts while indirectly making tax payments of the carbon tax.	
Minimum tax gap – Is the likelihood of intentional and unintentional non-compliance likely to be low?	The number of taxpayers will be smaller than if the tax were owed directly by consumers. Also, the producers subject to the tax tend to be large sophisticated taxpayers who are able to comply with tax obligations. Thus, noncompliance is unlikely to occur, and the tax gap is expected to be low. On the other hand, there could be a chance for non - compliance with respect to individual taxpayers based on these issues: trying to get maximum refundable tax credit, or giving misleading information about dependents though there are no such people in reality. This may happen because the refundable tax credit amount is $1,000 to each taxpayer and to each dependent of that taxpayer. People may be enticed to get a maximum credit and try to produce incorrect information to obtain a greater credit than allowed.	+/-
Accountability to taxpayers – Will taxpayers know the purpose of the rule, why needed and whether alternatives were considered? Can lawmakers support a rationale for the rule?	The lawmakers have a strong rationale for this bill because rising carbon emissions create a host of potential economic and environmental threats, including human health risks, reduced agricultural productivity, and, ecosystem deterioration. Thus, policymakers are trying to establish a price on carbon emissions by levying a tax. It is essential for the lawmakers to explain the purpose and scope of the bill to taxpayers. Otherwise taxpayers might not understand why it is proposed and why they will receive a refundable tax credit.	+/-
Appropriate government revenues – Will the government be able to determine how much tax revenue will	The carbon tax bill does meet the appropriate government revenues principal because government could easily measure how much to be raised by the carbon tax and how much the credit will cost. Government will have all the necessary information as to how much carbon-based fuels we consume now. In addition, the amount of tax credit to	+

likely be collected and when?	be claimed can be reasonably estimated on the extensive taxpayer data the IRS has.	

Rating Summary

The table below summarizes the ratings of how H.R. 5457 stacks up against the principles of good tax policy.

Criteria	Result
Equity and Fairness	-
Certainty	+/-
Convenience of payment	+/-
Effective Tax Administration	+/-
Information Security	NA
Simplicity	-
Neutrality	-
Economic growth and efficiency	+/-
Transparency and Visibility	-
Minimum tax gap	+/-
Accountability to taxpayers	+/-
Appropriate government revenues	+

Conclusion

Based on the above analysis, H.R. 5457 has neutral and negative effects on all the tax policy principles except appropriate government revenues. The intention of the bill is to reduce the carbon dioxide emissions and to encourage people, businesses and governments to contribute less to the global carbon footprint. The bill proposes to impose $40 per ton on the carbon content contained in fuels that are produced in coal, gasoline and oil located in United States. The Tax Policy Center estimates that this amount of carbon tax would increase gas prices by 36 cents per gallon.[2] The rationale behind this bill is that increasing the cost of carbon-based fuels will motivate companies to switch to clean energy. These include solar energy, wind energy, and hydro-powered sources. The carbon tax will also increase the price of gasoline and electricity to encourage consumers to choose energy-efficient appliances and activities, and further reduce greenhouse gas emissions.

H.R. 5457 takes into account that a carbon tax would fall more heavily on workers and investors in carbon-intensive industries as well as on regions that depend heavily on carbon-intensive fuels, particularly coal, and takes necessary steps to address this disparity. It should be seen that the low-income taxpayers who pay higher taxes would get refundable tax credits. To this effect, the bill proposed to allow a refundable credit of $1,000 for each taxpayer and dependent of each taxpayer subject to thresholds. The sponsors should evaluate and explain the reason for this large credit and why it is not connected to any effort to reduce use of carbon-based fuels.

A carbon tax offers several means to combat the problems caused by carbon emissions. As discussed in this article, there are challenges in designing and administering an effective carbon tax policy that meets the principles of good tax policy. Yet, some improvements can be made as noted here in addition to clarifying the terminology used in the bill.

[2] Tax Policy Center, Briefing Book, What is a carbon tax?; available at https://www.taxpolicycenter.org/briefing-book/what-carbon-tax.