# SAMPLE CARBON FEE / TAX LEGISLATION

**MARC BRESLOW, PH.D. I** POLICY & RESEARCH DIRECTOR

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**31 St. James Avenue, Fl. 6, Boston MA 02116**
**www.Climate-XChange.org | 617.624.0919**

## INTRODUCTION

The document below is a sample of how to structure and design carbon fee/tax legislation. It is based on several bills that have been introduced into state legislatures in the United States to date. We suggest that the reader use this document in conjunction with our *Recommendations for State-Level Carbon Pollution Pricing*, which gives extensive explanations for why our sample bill is designed as it is, and for the choices that you will have to make in designing particular provisions of your bill.

The sample bill below contains the following sections:



In two of these sections we have given the reader several alternative versions of the provisions, recognizing that different states will make different choices among the various possibilities.

## I. DEFINITIONS

SECTION 1: Definitions

“Adult,” a resident of [state] age 18 or above.

“Minor,” a resident of [state] age 17 or below.

“Quintile 1,” the 20 percent of households in [state] with the lowest after-tax incomes.

“Quintile 2,” the 20 percent of households in [state] with the next-to-lowest after-tax incomes; also termed those households with incomes from the 20$^{th}$ to 40$^{th}$ percentile of all households in [state].

“Quintile 3,” the middle 20 percent of households in [state] based on after-tax incomes; also termed those households from the 40$^{th}$ to 60$^{th}$ percentile of all households in [state].

“Quintile 4,” the next to highest 20 percent of households based on after-tax incomes; also termed those households from the 60$^{th}$ to 80$^{th}$ percentile of all households in [state].

“Quintile 5,” the 20 percent of households with the highest after-tax incomes of all households in [state].

“_____ [acronym] Commissioner”, the commissioner of the state’s department that handles incoming and outgoing revenue.

‘’Greenhouse gas”, carbon dioxide ($CO_2$), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6), and any other matter identified by the department of energy resources as a likely contributor to climate change.

“Greenhouse gas-emitting priority”, matter that emits or is capable of emitting a greenhouse gas when burned or released to the atmosphere and is identified as a priority under the terms of this act, except that natural gas, petroleum, coal and any solid, liquid or gaseous fuel derived therefrom shall be greenhouse gas-emitting priorities.

“Greenhouse gas pollution charges”, the charges imposed on each ton of CO2e pursuant to this chapter.

$CO_2e$, the number of metric tons of $CO_2$ emissions with the same global warming potential as one metric ton of another greenhouse gas.

“Employer”, any person, corporation, partnership, governmental body, or other entity that has employees working in [state].

“Green Infrastructure Fund”, a fund whose revenues are derived from the pollution charges defined in this section, and whose funds are used to finance the development of green infrastructure, according to section [section number].

“Greenhouse gas pollution charges fund”, the greenhouse gas pollution charges fund established under section [section number], also called the “pollution charges fund.” Of this chapter.

“Lifecycle Emissions,” greenhouse gas emissions that are released during phases of a fuel or other product’s life, including those emissions released during extraction, processing, transportation, and disposal.

“Motor vehicle fuel”, fuel for the operation of a motor vehicle, provided, that “fuel” and “Motor vehicle” shall have the same meanings as defined in [relevant sections of state law]

“Total rebate shares,” the sum of all [state] residents age 18 or older, plus one-half the sum of all [state] residents age 17 or younger.

“Resident” shall have the same meaning as defined in [relevant section of state law].

“Low-income households” are those with household incomes at or below 60 percent of the statewide median household income or 60 percent of the area median household income as calculated annually by the United States Department of Housing and Urban Development.

“Low-income communities” are census tracts with median household incomes at or below 60 percent of the statewide median income.

“Rural households” are those residing in a municipality with a population density equal to or less than 500 residents per square mile of land in the municipality.

“The [head of state environmental agency]”, The [head of the state’s environmental agency].

## II. GENERAL AUTHORITY

SECTION 2

Section ________________________, is hereby amended by inserting after the last paragraph the following:

The [head of state environmental agency] shall administer the schedules of greenhouse gas pollution charges and the greenhouse gas pollution charges rebate fund, both established pursuant to this chapter. The [head of agency] shall delegate all collection of greenhouse gas pollution charges, distribution of rebates, and any other appropriate functions to the [department of revenue]. The [department of revenue] will carry out all functions delegated to it by the [state environmental agency].

______________________________ [reference to appropriate section of the state's laws], as so appearing, is hereby amended by inserting after ____________ the following sections:

## III. GREENHOUSE GAS POLLUTION SCHEDULE AND CHARGES

**Commentary: Schedule of Charges**

*There are a variety of ways to have the schedule of CO2 charges vary, generally going up over time. One way is to specify the charges in dollar amounts, usually ending at a particular charge. Another way is to add an inflation indicator or a percentage increase each year. A third, more complicated method is to have the future schedule of charges depend on whether the state is meeting its GHG reduction targets, with the charges going up if the targets are not met.*

(a) The [head of state environmental agency] shall, using the best information and science reasonably available, consider whether to identify any greenhouse gas-emitting matter, in addition to natural gas, petroleum, coal, and any solid, liquid or gaseous fuel derived therefrom, as a greenhouse gas-emitting priority for the purposes of this chapter; except that emissions from farm animals and crops shall not be designated greenhouse gas-emitting priorities.

(b) The [head of state environmental agency] shall determine the schedule of greenhouse gas pollution charges authorized under this chapter by multiplying the $CO_2e$ of each greenhouse gas-producing substance by the charge or charges established herein. For the purpose of calculating said schedule, the [head of state environmental agency] shall determine the average $CO_2e$ per unit of each greenhouse gas-producing substance. For substances where the $CO_2e$ per unit is not precisely known, because the rate of leakage of the substance into the atmosphere is uncertain or for other reasons, the [head of state environmental agency] shall use the best available information to estimate the average $CO_2e$ per unit of the substance used in [state].

## Alternative 1 – fixed annual dollar increments

SECTION 3: Schedule of charges

(c) The [acronym for revenue commissioner] commissioner, in consultation with the [head of state environmental agency], shall collect greenhouse gas pollution charges on the distribution or sale of greenhouse gas-emitting priorities. The charge in the first year of operation shall be $20 per ton of $CO_2$e. Said charges shall increase by $5 every year until the rate is $50 per ton of $CO_2$e in year seven.

## Alternative 2 – fixed annual increments, followed by percentage increases

SECTION 3: Schedule of charges

(c) The [acronym for revenue commissioner] commissioner, in consultation with the [head of state environmental agency], shall collect greenhouse gas pollution charges on the distribution or sale of greenhouse gas-emitting priorities. The charge in the first year of operation shall be $20 per ton of $CO_2$e. Said charges shall increase by $5 every year until the rate is $50 per ton of CO2e. After reaching $50, the rate shall increase by 5 percent each year plus the annual rate of change in the previous year in the federal Consumer Price Index.

## Alternative 3 – Adjustments according to GHG progress

SECTION 3: Schedule of charges

(c) Beginning in the eighth year of implementation, the charge shall be annually defined as $50 plus $5 multiplied by the total number of years since the seventh calendar year of implementation in which the [head of state environmental agency] has determined that actual emissions have exceeded the annual emissions target for that calendar year, pursuant to [state GHG target], or the GHG target prorated to the current year.

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(d) The [head of state environmental agency] shall undertake all reasonable efforts to collect charges authorized pursuant to this chapter at the first point of distribution or sale within [state] of a greenhouse gas-producing substance. Before 2025, the [head of state environmental agency] shall amend current regulations, and develop new regulations if necessary, in order to measure and verify actual emissions of greenhouse gases from entities subject to carbon fees, in adherence with the timeframe described in Section 25A:13A(d). The regulations shall do all of the following:

(1) Require annual third-party verification of all entities subject to report greenhouse gas emissions.

(2) Make all reasonable efforts to promote consistency and streamlined reporting requirements across international, federal, and state greenhouse gas emission reporting programs.

(e) In the fourth year of implementation, and every two years thereafter, the [head of state environmental agency] shall report to the house and senate committees on [relevant legislative committees]. Said reports shall consider whether any further adjustments in greenhouse gas

*Commentary: Methane emissions add significantly to the overall GHG content of natural gas*

## Commentary: Lifecycle emissions

*Emissions from mining, processing and transportation of certain fuels can be a significant fraction of those from combustion of fuels. Your state may or may not feel that it has the capacity to determine these emissions, especially if they occur out-of-state, and apply the carbon charge to them*

pollution charges are recommended to account for inflation, to ensure progress towards reaching emissions limits for 2030, 2040, and 2050 included in or authorized by [state law setting GHG reductions over time], to mitigate serious harm to economic sectors, economic sub-sectors or individual employers of [state] caused by collection of greenhouse gas pollution charges.

(f) Subject to subsection (b) of this section, the [head of state environmental agency] shall determine the amount of carbon dioxide equivalents released in the form of escaped methane due to the extraction, transport, or distribution of natural gas before the point of consumption in the state, and shall add an additional charge to the carbon price for all natural gas based on the rate specified in subsection (c) of this section.

(h) Greenhouse gas-emitting priorities may produce GHG emissions prior to and subsequent to their combustion or other use within [state], including emissions during extraction, refining, processing, transportation, and disposal. Such emissions may be significant in relation to the emissions from combustion or other use within [state]. Within three (3) years of this act coming into effect, the [head of state environmental agency] shall issue a report and recommendations to the [legislature] as to whether such "lifecycle" emissions should have the greenhouse gas pollution charge applied to them.

*For states that are part of a regional or federal carbon pricing system:*

i) Power plants regulated by the Regional Greenhouse Gas Initiative, as defined in 310 CMR 7.70(1)(b), shall be exempt from the greenhouse gas pollution charges.

(j) Should the federal government, or a regional consortium of states, establish a carbon fee on the transportation or heating sectors, the DOR shall deduct the sum of payments made to other carbon price programs in the same year; provided, however, that the amount deducted may be no greater than the total amount of the carbon fee assessed by the DOR Commissioner.

## IV. USE OF REVENUE

SECTION 4: Green Infrastructure Fund

| Commentary: Green Infrastructure Fund |
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| *Different percentages of the fee revenue can be used for investment in clean energy and transportation, and adaptation to climate change, from zero percent to all of the funds* |

(a) There shall be established on the books of [state] a separate fund to be known as the Green Infrastructure Fund (GIF). The DOR commissioner shall deposit 30% of the proceeds collected under section 13A into said fund. The Green Infrastructure Fund will support investments in clean energy, clean transportation, and resiliency to the local impacts of climate change. Eligible projects shall include but not be limited to: investments in public transit, electric vehicles, electric vehicle infrastructure, and other modes of clean transportation; expansion of in-state renewable energy systems; energy efficiency and renewable energy investments in housing, municipal infrastructure, and public school buildings; and loan programs for small business climate resiliency, renewable energy, and efficiency upgrades. Funding for household projects shall include resources that enable renter households to access the benefits of energy efficiency and/or renewable energy.

(b) Governance

(1) A Green Infrastructure Fund Board of Directors shall be created, with its members chosen by the Governor of [state]. The [head of state environmental agency] shall serve as Chair of the Green Infrastructure Fund Board, with 17 members representing: (i) the department of transportation; (ii) the [state environmental agency]; (iii) the [state energy agency]; (iv) the [state agency in charge of housing/community development; (v) the [state treasurer]; (vi) the [state agency in charge of promoting renewable energy]; (vii) small business; (viii) large commercial/industrial business; (ix) organized labor; (x) state residents; (xi) low-income residents; (xii) municipalities; (xiii) clean energy; (xiv) public transportation; (xv) environmental protection; and (xvi) two separate representatives from regional planning associations representing different regions of the state.

(2) The [state energy or environmental or clean energy agency], with the guidance of the Green Infrastructure Fund Board of Directors (GIF Board), shall develop and issue two-year plans for expenditure of the GIF funds. The [state agency] shall assign responsibility for administering portions of the funds and plans to state agencies outside its authority, including but not limited to [relevant agencies].

(3) Municipal governments and regional agencies serving municipalities, including regional transit authorities, are eligible to apply for funding from the GIF, through a grant procedure to be developed by the [__________] under the direction of the GIF Board. The [____________] must make technical assistance available as part of this grant procedure, using funds specified in Section 13B(b)(4).

(4) The Green Infrastructure Fund shall be administered by the [_________] using up to 5% of Green Infrastructure Fund proceeds to cover administrative costs, including support from expert consultants, technical assistance to municipal governments and regional agencies, and program outreach.

(c) Investment

(1) Priority disbursements will be awarded to projects that concur with investment principles established by the GIF Board, in consultation with the public. Among these principles, all funded projects must facilitate, directly or indirectly, reductions of greenhouse gas emissions or provide resilience to the local impacts of climate change.

**Commentary: Greenhouse gas pollution charges fund**

*The money to be returned to households and businesses can have a variety of formulas, with the percentages of money going to households and businesses varying. Money going to households can go on an equal basis per person, or equal per adult and a partial share per child; or the money can be directed more toward low and moderate-income people. We have provided three versions below.*

(2) The investment plan shall allocate a minimum of 40 percent of the available monies in the fund to programs and projects that benefit individual low-income households, regardless of location, and to larger-scale projects located within the boundaries of, and benefiting individuals living in low-income communities.

(3) Any funding guidelines developed for administering agencies pursuant to Section 13B shall include guidelines for how administering agencies should maximize and measure benefits for low-income households and communities, provided further that all construction, reconstruction, alteration, installation, demolition, maintenance or repair paid through the Green Infrastructure Fund shall be subject to [relevant section of state law].

(d) Annual Reporting

(1) The [ ________] shall submit an annual report to the appropriate committees of the Legislature on the status of projects funded pursuant to this bill and their outcomes.

(2) Administering agencies shall report to the [______], and the [________] shall include in the report, a description of how the administering agencies have fulfilled legislative requirements pursuant to Section 13B(a) and Section 13B(c).

SECTION 5: Greenhouse gas pollution charges fund

(a) There shall be established on the books of [state] a separate fund to be known as the greenhouse gas pollution charges fund. [revenue commissioner] shall deposit into said fund all proceeds collected under [section of law] that remain after distribution of funds to the Green Infrastructure Fund. None of said proceeds shall fund government operations of [state], other than to pay for reasonable administrative costs as provided under sub-section (b) of this section.

(b) The [revenue commissioner] shall disburse all greenhouse gas pollution charge proceeds as follows. 75 percent of the moneys shall be put into a household fund that is part of the greenhouse gas pollution charges fund. 25 percent of the monies shall be put into an employers' fund that is part of the greenhouse gas pollution charges fund. The [revenue commissioner] may retain a reasonable amount of charge proceeds to pay for the costs of administering the activities authorized by this chapter. Proceeds shall be available for the purposes enumerated in this section without appropriation.

## Equal rebates per adult, half shares per child

SECTION 5

(c) The funds placed in the household fund shall be divided by the total rebate shares, as defined in Section 1 above, with the resulting number termed the "rebate per adult." Each household, across all quintiles, shall receive a rebate equal to the rebate per adult times the number of adults in the household plus the rebate per adult times one-half the number of children in the household.

## Rebates directed more toward low and moderate income households

SECTION 5

(c) Of the funds transferred to the household fund, 25 percent of the total funds shall be used as follows:

(1) Ten (10) percent of the household rebate fund shall be distributed to households in quintile 1, as defined in Section 1 above. This 10 percent shall be divided by the sum of the adults in quintile one plus one-half the minors in quintile one, with the resulting number termed the "quintile 1 initial rebate." Each household in quintile 1 shall receive a rebate equal to the number of adults in the household times the quintile 1 initial rebate, plus the number of children in the household times one-half the quintile 1 initial rebate.

(2) Ten (10) percent of the household rebate fund shall be distributed to the households in quintile 2. This 10 percent shall be divided by the sum of the adults in quintile 2 plus one-half the minors in quintile 2, with the resulting number termed the "quintile 2 initial rebate." Each household in quintile 2 shall receive a rebate equal to the number of adults in the household times the quintile 2 initial rebate, plus the number of children in the household times one-half the quintile 2 initial rebate.

(3) Five (5) percent of the household rebate fund shall be distributed to the households inquintile 3. This five (5) percent shall be divided by the sum of the adults in quintile 3 plus one-half the minors in quintile 3, with the resulting number termed the "quintile 3 initial rebate." Each household in quintile 3 shall receive a rebate equal to the number of adults in the household times the quintile 3 initial rebate, plus the number of children in the household times one-half the quintile 3 initial rebate.

(d) The remaining 75 percent of the household fund shall be distributed as follows:

## Extra rebates for rural households

(1) The DOR commissioner shall direct a portion of the monies to households in the form of motor fuel rebates, and a separate portion of the monies to households in the form of home heating rebates. These portions are calculated as a percentage of annual carbon fee revenue derived from the sale of motor fuel and the sale of heating fuels to households, multiplied by total available monies in the household fund after allocations in Section _______(c) are carried out.

(2) Of the money directed to motor fuel rebates pursuant to Section ___(d)(1), rural households, as defined in Section 1 above, shall receive a greater rebate per adult than non-rural households. The DOR Commissioner shall direct motor fuel rebates to each household in the [state], such that:

(i) Non-rural households receive a flat rebate per adult, and a flat half rebate per minor.

(ii) Rural households receive a rebate per adult that is 1.3 times greater than the flat rebate per adult received by non-rural households. Rural households receive a rebate per minor that is 1.3 times greater than the flat half rebate per minor received by non-rural households.

### Extra rebates for low-income users of heating fuels

(3) Ten (10) percent of the funds calculated in Section 2 that derive from charges collected on the sale of heating fuels to households shall be allocated to [state]'s [fund to help low-income households pay their heating bills] and transferred to the [name of agency] for incorporation into that program, provided that [name of agency] shall have discretion to determine eligibility for these funds.

### Remaining rebates after extra rebates to low income, rural, and low-income heating fuel users are distributed

(4) The funds remaining in the household fund after the allocation of funds in Section (5)(d)(1), (5)(d)(2), and (5)(d)(3) shall be divided by the total rebate shares, as defined in Section 1 above, with the resulting number termed the "remaining rebate per adult." Each household, across all quintiles, shall receive a rebate equal to the remaining rebate per adult times the number of adults in the household plus the remaining rebate per adult times one-half the number of children in the household.

(e) In rebating greenhouse gas pollution charge proceeds, the DOR Commissioner shall coordinate with officials of the [relevant state agencies] and other agencies in making all reasonable efforts to identify the names and addresses of all residents, with special attention to the names and addresses of low-income residents, so that they can receive rebates expeditiously.

### Employers Fund

(f) The [revenue commissioner] shall allocate the remaining 25 percent of the greenhouse gas pollution charge fund to the employers fund, to be distributed as follows:

(1) The [revenue commissioner] shall allocate $1 million of the employers fund annually to the Rapid Response Set-Aside fund, solely for the purpose of providing assistance to workers and communities experiencing displacement, loss of tax revenue, or other forms of economic loss due to the shrinkage of fossil fuel industries.

(2) The [revenue commissioner], in consultation with the [head of state environmental agency] and the commissioner of housing and economic development, shall, with special attention to manufacturing, agriculture, fisheries, and local governments, identify economic sectors or economic sub-sectors at risk of serious negative impacts as a consequence of the charges collected pursuant to this chapter. The commissioner may, as mitigation, calculate the total proceeds collected from said sectors or subsectors and may apportion part or all of said proceeds to the affected sector or sub-sector, provided that the sum of these rebates does not exceed the total available moneys in the employer fund. In order to provide such mitigation, the [revenue commissioner] shall show that such impacts are likely to occur, due to competition from employers outside [state] in combination with energy costs constituting a substantial fraction of total operating costs in the economic sector or sub-sector.

(2) Should additional monies remain in the employer fund after distribution pursuant to Section (5)(f)(1) and Section (5)(f)(2), the [revenue commissioner] shall rebate the remaining employer funds to all other employers not included in Section 5(f)(1) or Section 5(f)(2), including those employers otherwise exempt from taxes under [___________] due to their status as not-for-profit organizations or government entities. The [revenue commissioner] shall distribute these funds such that each employer receives a flat rate of compensation times the number of full time equivalent employees.

(g) The [revenue commissioner] shall not be subject to penalties or lawsuits for damages if the charges collected under this chapter are not precisely equal to rebates returned under this chapter; provided, that the commissioner shall make all reasonable efforts to return to residents and employers in the aggregate all charges collected under this chapter, except for those funds placed in the fund for green infrastructure.

SECTION 6: Regulations; Miscellaneous

(a) The [revenue] commissioner and [head of state environmental agency] shall promulgate rules and regulations necessary to carry out the provisions of this chapter.

(b) If any covered fuel or its derivative is used by a government agency whose primary purpose is to provide public transportation by bus, van, rail, ferry, or other means that reduce the amount of driving by private motor vehicles, the DOR commissioner shall fully compensate or exempt these agencies for their total costs associated with this chapter.

*In order to provide timely rebates to vulnerable households:*

(c) The [revenue] commissioner shall do at least one of the following: (i) Provide rebates to low and moderate income households twice each year in advance of the annual heating season and summer cooling season; (ii) distribute part or all of the annual expected value of household rebates to low and moderate-income households prior to collecting greenhouse gas charges in year one; or (iii) otherwise set schedules and methods for distribution of rebates that ensure low and moderate-income households obtain rebates corresponding to the time schedule in which they can be expected to be paying greenhouse gas pollution charges.

(d) The commissioner may issue additional rebates or declare exemptions from charges in instances where charges have been paid but no emissions occur or are anticipated to occur.

### Commentary: Fees on biomass

*In the past, burning of biomass, such as virgin wood or plants, has been considered carbon-neutral, because the trees or plants are expected to regrow, absorbing $CO_2$ as they grow. But recent research has found that it takes many years for regrowth to equal the $CO_2$ capacity of the virgin wood and the emissions from burning.*

(e) The [head of state environmental agency] shall study the feasibility of imposing and collecting additional greenhouse gas emission charges on emissions attributable to biomass. The report shall include an analysis of the feasibility and expense of (i) calculating a reasonably accurate current statistical baseline, specific to [state], of such emissions, and (ii) under what conditions biomass usage should be exempt from carbon fees. Within nine months of the effective date of this act, the commissioner shall submit the report to the house and senate committees on ways and means, the joint committee on telecommunications, utilities, and energy, and the house and senate committees on global warming and climate change.

*In order to avoid rebates from counting for eligibility for state programs with income limits:*

(f) Rebates distributed pursuant to Section 13C shall not be counted in determining eligibility for other state programs with income limitations. To the degree possible, said rebates shall not count towards income limitations for federal programs.