H.832 – “2050 Roadmap Bill”

An Act to create a 2050 roadmap for a clean and thriving Commonwealth.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Section 1 of chapter 21N is hereby amended by striking out lines 17 through 20, and inserting in place thereof the following:

“Direct emissions”, emissions from sources that are owned or operated, in whole or in part, by any person, entity, or facility including, but not limited to, emissions from any transportation vehicle, any building or structure, or any residential, commercial, institutional, industrial or manufacturing process.

SECTION 2. Section 1 of chapter 21N is hereby amended by adding after line XX:

“Greenhouse gas-emitting priority,” matter that emits or is capable of emitting a greenhouse gas when burned including, without exception, natural gas, petroleum, coal, and any solid, liquid or gaseous fuel derived therefrom as well as all others identified as such by the department.

SECTION 3. Section 1 of chapter 21N is hereby amended by striking out lines XX through YY, and inserting in place thereof the following:

“Indirect emissions”, emissions associated with the consumption of any greenhouse gas-emitting priority or purchased electricity, steam and heating or cooling by an entity or facility.

SECTION 4. Section 1 of chapter 21N is hereby amended by striking out lines XX through YY, and inserting in place thereof the following:

“Market-based compliance mechanism”, any form of priced compliance system imposed on sources or categories of sources, or pricing mechanism imposed directly on greenhouse gas-emitting priorities or on their distribution or sale, designed to reduce emissions as required by this act including, but not limited to (i) a system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit greenhouse gases; or (ii) greenhouse gas emissions exchanges, banking, credits and other transactions governed by rules and protocols established by the secretary or a regional
program that result in the same greenhouse gas emissions reduction, over the same time period, as
direct compliance with a greenhouse gas emissions limit or emission reduction measure adopted by the
executive office pursuant to this chapter; or (iii) a system of charges or exactions imposed in order to
reduce statewide greenhouse gas emissions in whole or in part.

SECTION 5. Subsection (a) of section 2 of chapter 21N of the General Laws, as appearing in the
2016 Official Edition, is hereby amended by striking out its first sentence and inserting in place thereof
the following:-

The department shall monitor and regulate greenhouse gas-emitting priorities and direct and indirect
emissions of greenhouse gases with the goal of reducing those emissions in order to achieve greenhouse
gas emissions limits established by and pursuant to chapters 21N and 21N1/2.

SECTION 6. Subpart (4) of subsection (b) of section 3 of chapter 21N of the General Laws, as
appearing in the 2016 Official Edition, is hereby amended by striking it out and inserting in place thereof
the following:-

(4) a 2050 statewide emissions limit that achieves at least net zero statewide greenhouse gas emissions.

SECTION 7. Chapter 298 of the Acts of 2008 is hereby amended by striking out section 16 in its
entirety.

SECTION 8. The General Laws are hereby amended by inserting after chapter 21N the following
chapter: Chapter 21N1/2.

GLOBAL WARMING SOLUTIONS IMPLEMENTATION ACT.

Section 1. Unless otherwise defined herein, terms defined in section 1 of chapter 21N have the
same meaning when used in this chapter.
Section 2. No later than December 31, 2020, the secretary shall conduct and publish the results of detailed, quantitative modeling and analysis of the commonwealth’s energy economy and emissions in their regional context, to include the regional electric grid, sufficient to identify multiple technically and economically feasible pathways of reducing statewide emissions consistent with the 2050 emissions limit required by section 3(b) of chapter 21N. Such modeling and analysis shall employ back-casting methodology, shall be comparable to that conducted by the European Union in support of its Roadmap 2050 effort, may be conducted in conjunction with other states or regional entities as part of an analysis of reducing regional emissions in 2050 to a level consistent with those required by chapter 21N for the commonwealth, and shall include or be accompanied by analysis quantitatively assessing for each pathway economic, environmental, and public health impacts particularly those that may benefit or burden low or moderate income people or any environmental justice populations. The secretary shall publish the results of the modeling and analysis required by this section, and shall also make available for public inspection and use the model, all model assumptions, and all input and output data.

Section 3. In conjunction with the modeling and analysis required in section 2, and in any case no later than December 31, 2020, the secretary shall adopt the interim 2030 and 2040 emissions limits consistent with that analysis and as required by section 3(b) of chapter 21N. The interim 2030 emissions limit shall be at least 50 per cent below the 1990 level, and the interim 2040 emissions limit shall be at least 75 per cent below the 1990 level. In setting the interim 2030 and 2040 emissions limits, the secretary shall comply with the second sentence of subsection (a) of section 4 chapter 21N and with subsections (b), (c), (d), (e), (f) and (g) of section 4 chapter 21N.

Section 4. After conducting the modeling and analysis required in section 2, and in any case no later than December 31, 2021, the secretary shall issue a 2050 emissions reduction roadmap plan in lieu of the plan update required by section 4(h) of chapter 21N. The 2050 emissions reduction roadmap plan...
shall describe in detail the commonwealth’s plan to achieve the 2050 emissions limit required by section 3(b) of chapter 21N, as well as the interim 2030 and 2040 emissions limits, by means of one or more technically and economically feasible pathways selected to reduce statewide emissions. The 2050 emissions reduction roadmap plan must address all sources or categories of sources that emit greenhouse gas emissions and indicate for each how, to what extent, and when the commonwealth will act to reduce their emissions as part of a plan achieve the 2050 emissions limit required by section 3(b) of chapter 21N. In developing the 2050 emissions reduction roadmap plan, the secretary shall comply with section 4 of chapter 21N as described in section 3. The secretary shall update the 2050 emissions reduction roadmap plan at least once every thirty months. This section 4 reporting requirement supersedes and replaces that required by subsection (h) of section 4 of chapter 21N.

Section 5. Separate from the plan required by section 4, the secretary shall after conducting the modeling and analysis required in section 2, and no later than December 31, 2021, issue the report required by section 5 of chapter 21N, hereinafter referred to as the Global Warming Solutions Act implementation assessment report. The report must quantitatively assess the effectiveness of all regulations and programs designed to reduce greenhouse gas emissions directly or indirectly and must also address all elements required by section 5 of chapter 21N, except that the secretary shall update and file the Global Warming Solutions Act implementation assessment report annually.

Section 6. No later than December 31, 2022, the commonwealth and its agencies shall promulgate regulations regarding all sources or categories of sources and all greenhouse gas emitting priorities sufficient to achieve the 2050 emissions limit required by section 3(b) of chapter 21N. The development of such regulations shall be coordinated by the secretary, and shall be consistent with the modeling and analysis required in section 2, with achievement of the adopted interim 2030 and 2040 emissions limits as required by section 3, and with the plan required by section 4, and shall be designed

Commented [A15]: Requires analysis of and plan for all sources/sectors of GHG emissions.

Commented [A16]: Clarifies obligation/streamlines administrative burden by replacing existing reporting requirement.

Commented [A17]: Requires new annual report on “how are we doing” — an assessment of implementation programs and regulations. This references 21N s. 5 to retain the valuable public hearing elements referenced here.

Commented [A18]: Requirement for new comprehensive regulations to implement the new 2050 roadmap plan — important because there is no specific requirement for new action, post-2020 (other than to achieve the 2050 limit in 32 years) in the GWSA. This would also require for the first time that the regulations address all sectors and all sources needed to achieve 2050.
to ensure that the Commonwealth achieves its required emissions reductions equitably and in a manner that protects, and were feasible improves the condition of, low and moderate income persons and environmental justice populations, while creating, where feasible, additional employment and economic development in the commonwealth. The regulations required by this section 6 may include any market-based compliance mechanism or other carbon pricing for any greenhouse gas or greenhouse gas-emitting priority that the Secretary has determined to be likely to contribute to the cost-effective reduction of direct or indirect emissions as required by chapters 21N and 21N1/2.

Section 7. No later than six months after this chapter is enacted, the department may, in consultation with the secretary, impose a schedule of fees on regulated sources of greenhouse gas emissions sufficient to recover, for each fiscal year, the costs of implementation of chapters 21N and 21N1/2. Revenues collected pursuant to this section shall be deposited in a Global Warming Solutions Act Implementation Fund for use, as directed by the legislature or the secretary, solely for the purpose of carrying out chapters 21N and 21N1/2.

Section 8. All municipal electric departments and municipal light boards as defined in section 1 of chapter 164A are subject to chapters 21N and 21N1/2 and shall be included in all regulations and programs associated therewith unless the secretary determines their inclusion will not contribute to the commonwealth’s achievement of the greenhouse gas emissions limits established by those chapters. When including municipal electric departments and municipal light boards in any such regulation or program, the secretary shall consult with the municipal electric departments and municipal light boards and shall take into account, where relevant, their size and structure as well as their existing programs, contractual obligations and asset ownership. In lieu of, or in conjunction with, the inclusion of municipal electric departments and municipal light boards in any such regulation or program, the secretary may order or allow a municipal electric department or municipal light board to submit for the secretary’s

Commented [A19]: “People”-centered protections particularly important going forward (transportation and homes/buildings)! See also Sec. 6 below.

Commented [A20]: Additional “people”-centered protections for development of regulations.

Commented [A21]: Allows but does not require carbon pricing in any form.

Commented [A22]: Requires collection of fees to fund implementation work by the Executive. More information here on CA’s version this is modeled on, the AB 32 Cost of Implementation Fee.

Commented [A23]: Clarifies that the GWSA applies to everyone in the Commonwealth. Important that entire state is working toward the same goal which is economy-wide emissions reductions, not just a certain percentage of clean or renewable electricity. Utilities – and MLPs – will likely be needed to foster/enable EVs and EV charging, as well as shifts in home heating (from oil and gas to renewable or non-emitting).

Commented [A24]: Before including MLPs in any emissions reduction program, EEA must take their special situation (relative to the large investor-owned utilities) into account.
review and approval, pursuant to chapter 30A of the General Laws, a comprehensive plan detailing that department or board’s plan to achieve or exceed the greenhouse gas emissions limits established by chapters 21N and 21N1/2. The secretary shall enforce any such plan so approved and may revoke approval for non-compliance.

Commented [A25]: EEA may allow MLPs (individually or across the board) to develop their own GWSA-compliance plan, that if approved by EEA becomes an enforceable (by EEA) obligation.