SENATE No. 2402

Senate, Thursday, June 30, 2016 -- Text of amendment (8) (offered by Senator Pacheco) to the Ways and Means amendment (Senate, No. 2372) to the House Bill to promote energy diversity.

The Commonwealth of Massachusetts

In the One Hundred and Eighty-Ninth General Court (2015-2016)

Messrs. Pacheco and Brady, Ms. L'Italien, Mr. Lewis, Ms. Gobi, Mr. Eldridge and Ms. Jehlen move to amend the bill by inserting the following new sections:-

SECTION __ Subsection (b) of section 3 of chapter 21N of the General Laws, as appearing in the 2014 Official Edition, is hereby amended by striking out clauses (2) and (3) and inserting in place thereof the following 2 clauses:- (2) a 2030 statewide greenhouse gas emissions limit accompanied by plans to achieve this limit in accordance with said section 4; provided, however, that the 2030 statewide greenhouse gas emissions limits shall maximize the ability of the commonwealth to meet the 2050 statewide greenhouse gas emissions limit; (3) a 2040 statewide greenhouse gas emissions limit accompanied by plans to achieve this limit in accordance with said section 4; provided, however, that the 2040 statewide greenhouse gas emissions limit shall maximize the ability of the commonwealth to meet the 2050 statewide greenhouse gas emissions limit.

SECTION __ Subsection (a) of section 4 of said chapter 21N, as so appearing, is hereby amended by inserting after the first sentence the following 2 sentences:- The secretary shall further adopt the 2030 statewide greenhouse gas emissions limit pursuant to subsection (b) of section 3 which shall be between 35 per cent and 45 per cent below the 1990 emissions level and a plan for achieving that reduction. The secretary shall further adopt the 2040 statewide greenhouse gas emissions limit pursuant to said subsection (b) of said section 3 which shall be between 55 per cent and 65 per cent below the 1990 emissions level and a plan for achieving that reduction.

SECTION __ Said subsection (a) of said section 4 of said chapter 21N, as so appearing, is hereby further amended by striking out the last sentence and inserting in place thereof the following sentence:- The 2020, 2030 and 2040 statewide greenhouse gas emissions limits and implementation plans shall comply with this section.

SECTION __ Said section 4 of said chapter 21N, as so appearing, is hereby further amended by striking out, in line 16, the word "limit" and inserting in place thereof the following word:- limits.

SECTION __ Said section 4 of said chapter 21N, as so appearing, is hereby further amended by striking out, in line 42, the words "2020 emission limit and implementing plan" and inserting in place thereof the following words:- 2020, 2030 and 2040 statewide greenhouse gas emissions limits and implementing plans.

SECTION __ The General Laws are hereby amended by inserting after chapter 210 the following chapter:-

CHAPTER 21P.

COMPREHENSIVE ADAPTATION MANAGEMENT ACTION PLANNING IN RESPONSE TO CLIMATE CHANGE

Section 1. As used in this chapter, the following words shall have the following meanings unless the context clearly requires otherwise:

"Adaptation", a response and process of adjustment to actual or expected climate change and its effects that seeks to increase the resiliency and reduce the vulnerability of the commonwealth's built and natural environments and seeks to moderate or avoid harm or exploit beneficial opportunities to reduce the safety and health risks that vulnerable human populations and resources may encounter due to climate change.

"Executive office", the executive office of energy and environmental affairs.

"Hazard mitigation", an effort using nonstructural measures to reduce loss of life and property by lessening the impacts of major storms.

"Plan", the comprehensive adaptation management action plan.

"Public utility", as defined in clause (7) of paragraph (j) of section 5 of chapter 21E.

"Resilience", the ability to respond and adapt to changing conditions and withstand and rapidly recover with minimal damage from disruption due to climate-related events and impacts which may include, but shall not be limited to, shoreline improvement, seawall maintenance and expansion, infrastructure improvement or innovative building design and construction.

"State agency", a legal entity of state government established by the legislature as an agency, board, bureau, department, office or division of the commonwealth with a specific mission that may either report to an executive office or secretariat or be independent division or department.

"State authority", a body politic and corporate constituted as a public instrumentality of the commonwealth and established by an act of the legislature to serve an essential governmental function; provided, however, that "state authority" shall include energy generation and transmission, solid waste, drinking water, wastewater and stormwater and telecommunication utilities serving areas identified by the executive office as subject to material risk of flooding; provided further, that unless designated as such by the secretary of energy and environmental affairs, "state authority" shall not include: (i) a state agency; (ii) a city or town; (iii) a body controlled by a city or town; or (iv) a separate body politic for which the governing body is elected, in whole or in part, by the general public or by representatives of member cities or towns.

Section 2. (a) The secretary of energy and environmental affairs and the secretary of public safety and security, in consultation with appropriate secretariats as determined by the governor, shall develop, draft, adopt and revise at least once every 10 years, a comprehensive adaptation management action plan. The plan shall encourage and provide guidance to state agencies, state authorities and regional planning agencies to proactively address the consequences of climate change. The plan shall also provide a process for local and regional climate vulnerability assessment and adaptation strategy development and implementation and may encourage and provide guidance to cities and towns to proactively address the consequences of climate change. The plan and any updates shall be filed with clerks of the house of representatives and senate. The plan shall be developed with guidance from the comprehensive adaptation management action plan advisory commission established in section 3.

Upon the adoption of the plan, all certificates, licenses, permits, authorizations, grants, financial obligations, projects, actions and approvals for any proposed projects, uses or activities in and by a state agency or state authority shall be consistent, to the maximum extent practicable, with the plan.

(b) The plan shall include, but not be limited to: (i) a statement setting forth the commonwealth's goals, priorities and principles for ensuring effective prioritization for the resiliency, preservation, protection, restoration and enhancement of the commonwealth's built and natural infrastructure; (ii) a commitment to sound management practices which shall take into account the existing natural, built and economic characteristics of the commonwealth's most vulnerable areas and human populations; (iii) data on existing and projected climate trends, according to the best and latest data, forecasting and models including, but not limited to, changes for temperature, precipitation, drought, sea level, and inland and coastal flooding; (iv) a statement on the preparedness and vulnerabilities in the commonwealth's emergency response and infrastructure resiliency

including, but not limited to, energy, transportation, communications, health and other systems; (v) an assessment of economic vulnerability, including but not limited to, local businesses in high-risk communities; and (vi) an assessment of natural resources and ecosystems, identifying vulnerabilities and strategies to preserve, protect, restore and enhance.

Section 3. (a) There shall be a comprehensive adaptation management action plan advisory commission to assist the secretary of energy and environmental affairs and the secretary of public safety and security in developing the comprehensive adaptation management plan. The commission shall consist of: the secretary of the energy and environmental affairs or a designee; the secretary of public safety and security or a designee; 1 person from the University of Massachusetts with expertise in climate science chosen by the university; and 18 persons to be appointed by the secretary of energy and environmental affairs and the secretary of public safety and security, 1 of whom shall have expertise in transportation and built infrastructure, 1 of whom shall have expertise in commercial, industrial and manufacturing activities, 1 of whom shall have expertise in commercial and residential property management and real estate, 1 of whom shall have expertise in energy generation and distribution, 1 of whom shall have expertise in wildlife and land conservation, 1 of whom shall have expertise in water supply and conservation, 1 of whom shall have expertise in the outdoor recreation economy, 1 of whom shall have expertise in economic and environmental justice, 1 of whom shall have expertise in ecosystem dynamics, 1 of whom shall have expertise in coastal zones and oceans, 1 of whom shall have expertise in rivers and wetlands, 1 of whom shall be a professional engineer, 1 of whom shall be from a statewide nonprofit land and water conservation organization; 1 of whom shall have expertise in historic and cultural resources, 1 of whom shall be a property owner in a coastal community, 1 of whom shall have expertise in small business administration, 1 of whom shall be a certified floodplain manager and 1 of whom shall have expertise in local government. The secretary of energy and environmental affairs and the secretary of public safety and security shall jointly designate an appointee to serve as chair.

- (b) The advisory commission shall prepare a report:
- (1) identifying: (i) how the secretary of energy and environmental affairs can support existing adaptation, resilience and hazard mitigation efforts of state agencies, such as the StormSmart Coasts program at the office of coastal zone management, the coastal erosion commission report, BioMap2 at the department of fish and game and vulnerability studies being conducted by the department of public health and the Massachusetts Department of Transportation; (ii) recommendations of new actions that may be implemented immediately using existing

state agency legal authority, state resources and funding based upon the recommendations included in the climate change adaptation report prepared pursuant to section 9 of chapter 298 of the acts of 2008 and existing climate change action plans prepared by regional planning agencies and municipalities; (iii) unilateral actions that can be taken by the executive branch to increase climate adaptation, resilience and hazard mitigation including, but not limited to, executive orders and policy directives issued by the governor or policies, regulations and guidance by the secretary of energy and environmental affairs; (iv) recommendations of new climate resilience and adaptation actions that require legislative authority, state resources or funding, including identification of funds to leverage opportunities through public-private partnerships; and (v) the cost of climate adaptation within the 10-year term of the plan, based upon the adaptation actions recommended in this report, existing climate action plans, including those prepared by regional planning councils, municipalities and state agency cost assessments outlined in section 4; and

(2) providing information relative to the risks associated with climate change, both means and extremes, including, but not limited to, the risks associated with changes in temperature, drought, increased precipitation and coastal and inland flooding identified by the advisory committee on flood risks created by climate change established in section 39 of chapter 52 of the acts of 2014.

Section 4. Each state agency, state authority and public utility, as designated by the secretary of environmental affairs and the secretary of public safety and security, shall, in consultation with the executive office, develop and update at least once every 10 years a vulnerability and adaptation assessment for their portfolio of assets based on the relevant scientific data and information collected by the comprehensive adaptation management action plan advisory commission pursuant to section 3. The vulnerability assessments shall classify the economic losses over time associated with each major asset for the relevant climate risks including, but not limited to, coastal and inland flooding and extreme heat, as unacceptable, noncritical or immaterial. For assets exposed to material risk of unacceptable losses, the vulnerability assessment shall include order-of-magnitude cost-estimates for: (i) measures to protect the assets; (ii) measures to make the assets resilient; and (iii) removal and relocation of the assets from exposed areas. Estimates shall also be prepared for the economic, social and environmental damages if no adaptation actions are taken. Qualitative cost-benefit discussions of projected social impacts of flood prevention versus flood resilience shall also be included in the vulnerability assessment.

Section 5. The secretary of energy and environmental affairs and the secretary of public safety and security shall, at least 6 months before establishing a comprehensive plan pursuant to this chapter, provide for public access to the draft plan in electronic and printed copy form and shall provide for a public comment period, which shall include at least 5 public hearings across the commonwealth. The secretary of energy and environmental affairs and the secretary of public safety and security shall publish notice of any public hearing in the Environmental Monitor at least 30 days but not more than 35 days before the date of a hearing. A notice of a public hearing shall also be placed, at least once each week for the 4 consecutive weeks preceding the hearing in newspapers with sufficient circulation to notify the residents of the municipality in which the hearings shall be held. The public comment period shall remain open for at least 60 days from the date of the final public hearing. After the close of the public comment period, the secretary of energy and environmental affairs and the secretary of public safety and security shall issue a final plan and shall file the plan, together with legislation necessary to implement the plan, if any, by filing the same with the clerks of the house of representatives and senate.

Section 6. The plan shall be consistent with this chapter and all other general and special laws. Nothing in the plan shall be construed to supersede existing general or special laws or to confer any rights, or adversely impact existing rights, or remedies in addition to those conferred by general or special laws existing on the effective date of this chapter.

SECTION __ Section 16 of chapter 298 of the acts of 2008 is hereby amended by striking out, in lines 3 and 4, the words ", and shall expire on December 31, 2020".

SECTION __ The secretary of energy and environmental affairs shall develop and support a regional comprehensive climate change adaptation management action plan grant program which shall consist of financial assistance to regional planning agencies to develop and implement comprehensive cost-effective adaptation management action plans at the regional level of government. Funds shall be expended from item 2000-7070 of section 2A of chapter 286 of the acts of 2014 for the grant program and the department of energy resources may make available monies from amounts collected by the Department of Energy Resources Credit Trust Fund established in section 13 of chapter 25A of the General Laws for the grant program. Regional comprehensive adaptation management action plans shall include, but not be limited to: (i) technical planning guidance for adaptive municipalities through a step-by-step process for regional climate vulnerability assessment and adaptation strategy development; (ii) development of a definition of regional impacts by supporting municipalities conducting climate vulnerability assessments; (iii) a demonstrated understanding of regional

characteristics, including regional environmental and socioeconomic characteristics; and (iv) prioritization of protecting identified inland and coastal vulnerable locations not yet built upon. The grants shall advance statewide, regional and local efforts to adapt land use, zoning, infrastructure, policies and programs to reduce the vulnerability of the built and natural environment to changing environmental conditions as a result of climate change and for the development and implementation of an outreach and education program in low income and urban areas about climate change and the effects of climate change.

SECTION __ The executive office of energy and environmental affairs, in consultation with the division of capital asset management and maintenance, may acquire by purchase from willing sellers land abutting or adjacent to areas subject to the ebb and flow of the tide or on barrier beaches or in velocity zones of flood plain areas, on which structures have been substantially and repeatedly damaged by severe weather, for conservation and recreation purposes, including those rejected by the Pre-Disaster Mitigation Grant Program and the Hazard Mitigation Grant Program administered by the Federal Emergency Management Agency.

Prior to the acquisition of any land under this section, the executive office shall develop a conservation and recreation management plan and coastal erosion mitigation and management plan for any such land after consultation with the municipality in which the land is located. The plan shall set forth the priority, description and location of lands to be acquired and any land management agreement reached between the agency and municipality that provides for local responsibility to carry out the development and management of the property. Land acquired pursuant to this section shall contain a deed restriction stating that the land shall be used for conservation and recreation purposes only.

No land shall be acquired under this section until after a public hearing has been held by the executive office in the municipality in which the land is located to consider the management plan. The executive office shall notify the mayor and city council in a city or the board of selectmen, planning board and conservation commission, if any, of a town not later than 10 days prior to any such hearing.

If the executive office deems it necessary to make appraisals, surveys, soundings, borings, test pits or other related examinations to obtain information to carry out this section, the executive office or its authorized agents or employees may, after due notice by registered mail, enter upon lands, water and premises, not including buildings, to make such appraisals, surveys, soundings, borings, test pits or other related examinations and such entry shall not be a trespass. The executive office shall provide reimbursement for any injury or actual

damages resulting to the lands, waters and premises caused by any act of the executive office or its authorized agents or employees and shall, so far as possible, restore the lands to the same condition as prior to making such appraisals, surveys, soundings, borings, test pits or other related examinations.

SECTION ___ (a) The executive office of energy and environmental affairs, acting for and on behalf of the commonwealth, may lease to a municipality or nonprofit organization, on a form approved by the attorney general, for not more than 25 years, certain property acquired by the commonwealth pursuant to section _ or by the Federal Emergency Management Agency under 42 U.S.C. § 4001, as amended, for use as conservation and recreation areas. Leases shall be in such form and contain such provisions as the secretary of energy and environmental affairs, in consultation with the division of capital asset management and maintenance, shall determine, including such terms and conditions as necessary to comply with laws relative to the protection of barrier beaches. Lands shall be leased upon the express conditions that the land shall be used for conservation and recreation purposes only, that no permanent structures shall be erected and a reversionary clause that requires the lease to be terminated if the leased land is used in violation of any law relative to barrier beaches or condition of the lease.

(b) In consideration for the granting of a lease authorized in subsection (a), the lessee municipality or nonprofit organization shall agree to maintain the acquired land as a clean, safe and orderly conservation or recreation area.

SECTION __ The secretary of transportation shall conduct a feasibility study on the installation of charging stations for electric vehicles at rest stops along interstate highway route 90 and the implementation of section 75 of chapter 6C of the General Laws. The study and any recommendations shall be submitted to the clerks of the senate and house of representatives and the joint committee on transportation not later than December 31, 2016.

SECTION __ Pursuant to its authority under section 40 of chapter 131 of the General Laws, the commissioner of environmental protection shall promulgate rules regulating the dredging, filling or altering of land subject to coastal storm flowage.

SECTION __ The executive office of energy and environmental affairs and the executive office of public safety and security may expend such sums as may be available from any account, appropriation or fund available to the respective executive offices or to any agency within those executive offices to carry out chapter 21P of the

General Laws, including expenses in connection with the department's responsibilities under said chapter 21P and the cost of planning and for the development, redevelopment or improvement of land under said chapter 21P.

SECTION __ The regulations required pursuant to section __ shall be promulgated not later than 180 days after the effective date of this act.

SECTION __ The comprehensive adaptation management action plan advisory commission shall complete the first report required by subsection (b) of section 3 of chapter 21P of the General Laws not later than January 1, 2017 and shall complete a revised report at least once every 10 years thereafter.

SECTION __ The first comprehensive adaptation management action plan required by section 2 of chapter 21P of the General Laws shall be completed not later than January 1, 2018.

SECTION __ The 2030 statewide greenhouse gas emissions limit required by subsection (a) of section 4 of chapter 21N of the General Laws shall be adopted not later than January 1, 2021.

SECTION __ The 2040 statewide greenhouse gas emissions limit required pursuant to subsection (a) of section 4 of chapter 21N of the General Laws shall be adopted not later than January 1, 2031.