PREPARED FOR THE NEW YORK STATE BAR ASSOCIATION

Taking Action in New York on Climate Change: 2011 Update Report

The Current Status of the Recommendations Proposed in the 2009 Report

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INTRODUCTION

In January 2009, the New York State Bar Association's (NYSBA) Task Force on Global Warming (the Task Force) produced a comprehensive report (2009 Report) on the existing statutory, regulatory, and policy scheme currently in place in New York State regarding climate change. The 2009 Report further provided a set of specific proposals designed to facilitate further development of additional legislation and policy choices necessary to achieve significant cuts in greenhouse gas (GHG) emissions across the State. These recommendations represented actions that could be readily accomplished and that could yield real results. Given the fiscal situation then facing New York (and which continues today), the Task Force concentrated on action items that it expected would save money (due primarily to energy cost savings) or would, at worst, impose a modest up-front cost to State and local government. Moreover, the recommendations were carefully developed to target reform and innovation across a wide variety of sectors, including buildings and energy, land use, vehicles and transportation, and other initiatives.

In the subsequent months, the State has taken significant action to address climate change. In August 2009, Governor David Paterson signed Executive Order 24 (E.O. 24), which adopted a goal of reducing GHG emissions eighty (80) percent below 1990 levels by the year 2050. E.O. 24 also authorized the creation of a Climate Action Council charged with the responsibility of preparing the State's first Climate Action Plan. The Council produced a Climate Action Plan Interim report on November 9, 2010, and included – amongst the various climatic projections, sector profiles, and state-specific vulnerabilities –several recommendations and policies crafted to meet the goals established by E.O. 24. In addition to this initiative, the Sea Level Rise Task Force, created in 2007 by the Legislature, issued its own final report detailing the potential impact of rising seas on the State's coastlines and recommending adaptation measures. Finally, the New York State Assembly attempted to supplement this progress by passing a climate change bill in April 2010. This legislation, which would have set GHG emissions limits at twenty (20) percent below 1990 levels by 2020, was not approved by the Senate, however.

Although several of the recommendations issued in the 2009 Report were implemented in whole or in part during the 2009 and 2010, fewer than half of the recommendations originally offered in the Report were ultimately adopted. The purpose of this Update is to review the extent to which the recommendations from the 2009 Report were adopted or acted upon, and to identify those recommendations still awaiting action. This Update is particularly timely given the election of Governor Andrew Cuomo to the State's highest office in November, and the opportunity to re-commit the Executive Chamber and policymakers within the incoming Cuomo administration to the importance of achieving significant reductions in GHG emissions over the coming years. It is the hope of the Task Force that by identifying both progress and failures, the Update will provide a basis for refining and redeveloping the recommendations necessary to continue to advance the urgent objectives of mitigating the impact of climate change for New Yorkers and laying the foundation for the adaptation measures necessary to cope with the inexorable climate change impacts which are already upon us.

SPECIFIC PROPOSALS

BUILDINGS & ENERGY

1. Improve New York's Current Incentives Regarding Energy Efficiency in Buildings

a. *Centralize Information Concerning Energy Efficiency Incentives*

The 2009 Report observed that New York has so many tax credits and other incentives for green buildings that the complex eligibility rules are difficult to decipher. The recommendation in the 2009 Report was to establish a centralized clearinghouse for this information, including a toll-free hotline or website to provide information, answer questions and assist in the application process. The clearing house should be available to all (not just hospitals, schools and local governments) and should include information for residents as well. The information should also be available in hard copies with easy to understand summaries and application instructions. Utility companies should be encouraged to advertise websites and hotline information in customer bills.

Update:

The website of the New York State Energy Research and Development Authority (NYSERDA) features a "New York Energy Efficiency Clearinghouse for Institutional Customers."[1] The website states that it is a "single point of access" to the various energy efficiency programs, and includes information from NYSERDA, New York Power Authority (NYPA), Long Island Power Authority (LIPA), and Dormitory Authority of the State of New York (DASNY) (with accompanying links to each). The page also includes links to specific energy efficiency initiatives categorized by "Schools," "Local and State Governments," "Colleges and Universities," "Water and Wastewater," and "Healthcare Facilities."

However, this "Clearinghouse" page fails to provide a section specific to the needs of residents. While several of the links are applicable to residents, the information is diffuse and necessitates browsing through the many pages to determine exactly where the residential programs are located. For example, some of the pages feature a link for compact fluorescent (CFL) lighting rebates which would appear to apply to individual residents as well as to institutional customers. There is also a link to "Efficiency Programs" that takes one to a link which has specific programs for homes.

While the LIPA page has a clear link for programs for "My Home,"[2] the other LIPA pages do not provide clear links for residents. NYSERDA's homepage does include links for incentives for various entities (including residents), and this is relatively easy to navigate if one takes the time to look at all the related links on each page. There is a toll-free number to call that one may find through navigating the links, but it is not on the main page.

Unfortunately, the "Clearinghouse" main page offers neither a hotline number nor a clear place to download hard copies of applications or summaries unless one follows the various links through to the end. Centralizing this information should be prioritized for future ease of use.

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[1] *New York State Energy Efficiency Clearinghouse: Energy Efficiency Programs for Institutional Customers*, NEW YORK STATE STATE AGENCIES, http://www.nyserda.org/clearinghouse/ (last visited Jan. 18, 2011).

[2] *Long Island Power Authority,* NEW YORK STATE AGENCIES, http://www.lipower.org/ (last visited Jan. 18. 2011).

b. *Update Building Energy Codes More Swiftly & Provide Incentives for Local Code Enforcement*

New York updates its State Energy Code every three years and the Department of State (DOS) has reduced the review period from twelve to three months to expedite the process. It was recommended that other state agencies involved in the Code review process follow DOS's lead and streamline their own processes. In some municipalities the Code is not properly enforced. The 2009 Report recommended that New York provide incentives for proper training and enforcement and should consider including energy conservation themes in the training. A surcharge on fire insurance policies formerly was collected to fund Code enforcement, but these funds have since been diverted to the General Fund. Funding recommendations include consideration of reapportionment of this money, allowing cities to charge a fee for Code inspections, raising the levy on fire inspection fees, and giving some of surcharges levied through the Energy Efficiency Portfolio Standard (EEPS) proceeding at the Public Service Commission (PSC) for funding.

Update:

The American Recovery and Reinvestment Act of 2009 (ARRA) requires:

> [P]articipating States to adopt an energy code which meets or exceeds the 2009 International Energy Code (the 2009 IECC) for residential buildings and which meets or exceeds ASHRAE 90.1-2007 for commercial buildings.

In response to ARRA, the State Fire Prevention and Building Code Council has recently adopted a rule establishing the 2010 Energy Conservation Construction Code of New York State (the 2010 ECCCNYS) as the Energy Code in New York State. The 2010 ECCCNYS satisfies ARRA's requirements, and became effective on December 28, 2010.[3]

New York's DOS, in conjunction with NYSERDA, plans to conduct some 1,000 training sessions of various types, provide written guides and support and individual training to "code officials and design professionals." [4]

In order to meet the goal of 90% of buildings complying with the 2010 Energy Conservation Construction Code of NY State (ECCCNYS) by 2017, NYDOS in conjunction with NYSERDA will conduct some 1,000 training sessions of various types, provide one-on-one training to code officials and design professionals, offer written guides, and other such support initiatives.

At this point, there does not seem to be any State funding in place to assist municipalities in code training or enforcement, although ideas have been raised to provide funding from revenues raised through the Northeast Regional Greenhouse Gas Initiative (RGGI) or through System Benefits Charges (SBC) included in utility bills.[5] Nor does it appear that the Code updating process has been further

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[3] NEW YORK STATE AGENCIES DEPARTMENT OF STATE DIVISION OF CODE ENFORCEMENT AND ADMINISTRATION, http://www.dos.state.ny.us/code/energycode/nyenergycode.htm (last visited Jan. 18, 2011).

[4] *Id.; Energy Code Training and Support,* NEW YORK STATE AGENCIES NYSERDA, http://www.nyserdacodetraining.com/ (last visited Jan. 18, 2011).

[5] E-mail from J. Cullen Howe, Attorney at Arnold & Porter LLP, to Adonia David (Tuesday, January 04, 2011, 13:32 EST); E-mail from Jackson Morris, Senior Policy Advisor, Pace Energy and Climate Center, to Adonia David (Tuesday, January 04, 2011, 16:06 EST).

streamlined.[6] However, there are programs currently in place that seem to be attempting to strengthen code enforcement. NY State Certified Code Enforcement Personnel are required to receive 24 hours of in-service training annually, of which six hours may be online.[7] One of the online classes offered is "Green Building Strategies," which addresses issues of construction materials and strategies as well as various impacts of building materials at different stages.[8] Another program already in place began in 2007 when DOS required that local officials present annual reports of Code enforcement activities and mandated "stricter inspecting regimes."[9]

One new project to better manage code enforcement involves the U.S. Department of Energy, which has developed techniques and tools to measure compliance with energy codes and is funding pilot studies for states to use these tools. New York is one such state, and in 2010, NYSERDA awarded the Vermont Energy Investment Corporation (VEIC) a contract to assess compliance with ECCCNYS and to recommend ways to further compliance. "The assessment will be a comprehensive, statewide effort to determine how well provisions of the Energy Code are being complied with, in both the commercial and residential construction sectors; to identify areas of non-compliance; to determine methods of verifying compliance; to present the calculation of the overall rate of compliance; and to present recommendations on ways to improve compliance."[10]

c. *Expedite Processing for Climate-Friendly Projects*

The 2009 Report recommended that NY should allow "climate-friendly" projects to "move to the front of the line" when undergoing State review and that municipalities should be authorized to do the same. There should be clear criteria as to what sort of projects would qualify for this treatment.

Update:

This recommendation does not appear to have been implemented in any way. According to a spokesperson for the New York State Department of Environmental Conservation (DEC), many of the recommendations

> [A]re, or will be, addressed in various state-agency programs, or are consistent with policy options currently under consideration for inclusion in the State Climate Action Plan by the State Climate Action Council (see www.nyclimatechange.us). However, there are no plans to develop a program to expedite review of "climate-friendly" projects at this time. Implementation of this recommendation would raise several difficult issues, beginning with the definition of "climate-friendly." Moreover, there is little permit-review backlog at this time so that the added benefit of expediting

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[6] Howe, *supra* note 5.

[7] NEW YORK STATE AGENCIES DEPARTMENT OF STATE DIVISION OF CODE ENFORCEMENT AND ADMINISTRATION, http://www.dos.state.ny.us/code/onlineclass.html (last visited Jan. 18, 2011).

[8] Although this class is still listed as an offering, the link is no longer live. The description provided above is how it was previously described in its link.

[9] NEW YORK DEPARTMENT OF STATE, BUILDING A FOUNDATION FOR A HEALTHIER, MORE PROSPEROUS, MORE EFFICIENT NEW YORK: 2007-2010 ACCOMPLISHMENT REPORT, *available at* http://www.dos.state.ny.us/about/sos/AccompRpt2010_bookmarks.pdf.

[10] *State Energy Code Compliance Pilot Studies, Planned Studies and Participating States Summaries,* U.S. DEPT. OF ENERGY, http://www.energycodes.gov/arra/pilot_studies.stm.

review would be minimal relative to the effort required to develop such a program to the satisfaction of the regulated community.[11]

d. *Prioritizing Energy Efficiency Incentives for Affordable Housing*

The 2009 Report recommended that New York should prioritize energy efficiency incentives for those buildings that provide affordable housing.

Update:

NYSERDA has a webpage regarding the New York Energy $mart Multifamily Performance Program, where implementation of an energy efficiency program in existing buildings and adherence to specific targets can make a building owner eligible for incentives. These incentives are more for affordable housing than for market-rate housing.[12] Incentives for new multi-family buildings are also greater if the building is to be affordable housing rather than market rate housing.[13] In addition, new building projects that consist of five or more residential buildings that will house low-income individuals may be eligible for the "Green Affordable Housing Component," which provides "technical assistance to improve the energy efficiency, health, safety, and security of these projects as they are planned, designed, and constructed."[14] In addition to the regular incentives for new buildings, building projects in this program are also eligible for further incentives "for the installation of green building features, and will be required to gain LEED Certification at the Silver level."[15]

2. Enhance New York's Renewable Portfolio Standard

The 2009 Report recommended that New York raise its renewable portfolio standard (RPS) to at least thirty (30) percent by 2015. The previous goal of 25 percent by 2013 in fact represented an incremental addition of only 6%, as 19.3% of the state's renewable energy mix is already derived from large-scale hydroelectric power. Increasing this energy standard is critical for incentivizing renewable energy development throughout the state and would strengthen the market for continued investment. Moreover, such an action is necessary to maintain competitive advantage with numerous other states that have continued to raise their own standards.

Update:

The PSC acted upon this recommendation in an order issued in January 2010.[16] The order proactively established a new RPS goal of thirty (30) percent by 2015, matching the minimum figure proposed in the

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[11] E-mail from Mark Lowery, Climate Policy Analyst, DEC, to Adonia David (Tuesday, January 06, 2011, 11:50 EST).

[12] *Existing Buildings Incentive Schedule,* NYSERDA, http://www.getenergysmart.org/Files/Multifamily/ExistingBuildings/EB%20Incentive%20Schedule.pdf.

[13] *Multi-Family Performance Program – New Construction V4,* NYSERDA, http://www.getenergysmart.org/Files/Multifamily/NewConstruction/mpp-nc-v4-incentives.pdf.

[14] *Multi-Family Performance Program, Green Affordable Housing Component,* NYSERDA, *available at http://www.getenergysmart.org/Files/Multifamily/NewConstruction/Green%20Afforable%20Housing%20Application%202009.pdf.*

[15] *Id.*

[16] Case 03-E-0188, Renewable Portfolio Standard, Order Establishing New RPS Goal and Resolving Main Tier Issues (issued Jan. 8, 2010).

2009 Report.[17] This new target required renewable generation of 10.4 million MWh in 2015, which represents a modest increase from the annual target established for 2013 (10.0 million MWh). The Commission acknowledges that this higher annual target is conditioned upon the "use of the load forecast adopted in the EEPS proceeding adjusted downward to recognize expected efficiency achievements."[18] In the absence of this integration of energy efficiency achievements, the thirty (30) percent goal would actually have equated to a 17.0 million MWh target. This decision to link annual targets to the expected capture of EEPS energy efficiency improvements is cost-saving, as "energy that could have been obtained through more expensive RPS supply options that would otherwise not be required is instead paid for through EEPS."[19] Finally, the target year has been extended to 2015 both to soften the potential rate impacts for consumers and to efficiently coordinate renewable resource and energy efficiency planning.

Within the context of this RPS proceeding, the PSC paid special attention to the legitimate concern of geographic imbalances, with particular regard to the uneven distribution of RPS funding and ultimate project siting. Downstate consumers and utilities have argued that while most of the RPS funding revenues are derived from downstate customers, the RPS project locations (and the many associated benefits) are frequently located upstate. To remedy this, the PSC required that Department of Public Service staff report on recommended implementation plans designed to remedy potential imbalances, and authorized a budget of up to $30 million annually through 2015 for solicitations of qualifying, large-scale renewable projects located downstate (including solar photovoltaic (PV), anaerobic digesters, and fuel cells).[20] This keeps in place the central procurement model currently utilized by the State in soliciting and expanding renewable capacity, a process managed by NYSERDA. Subsequent Commission orders expanded upon the logistics of the program.[21]

3. Authorize the Public Service Commission to Require Time-of-Use Pricing

The 2009 Report recommended authorizing the PSC to require time-of-use pricing where such rates would be in the public interest, whereas it had previously been an option. In doing so, it was believed that customers would not only be better able to adjust their energy usage but it would also pave the way for increased usage in alternative energy sources, such as solar, which would be more cost-effective during peak times.

Update:

Since the Report was released, the New York legislature has not yet passed a bill requiring time-of-use pricing. It remains an option which large utility companies can offer customers on a voluntary basis, but as yet, is not mandated by law. At the same time, there have been a number of developments with respect to the recommended use of time-of-use pricing within New York:

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17 *Id*. at 10.

18 *Id*.

19 *Id*. at 14.

20 *Id*. at 16.

21 *See* Case 03-E-0188, Renewable Portfolio Standard, Order Resolving Main Tier Issues (issued Apr. 2, 2010); Case 03-E-0188, Renewable Portfolio Standard, Order Authorizing Customer-Sited Tier Program Through 2015 And Resolving Geographic Balance And Other Issues Pertaining To The RPS Program (issued Apr. 2, 2010). The orders resolved outstanding issues concerning the Main Tier (commercial renewable acquisitions) and Customer-Sited (which allows customer participation) procurement programs.

- The November 9, 2010 Interim Report of the New York State Climate Action Council, charged with developing a Climate Action Plan to implement the goal of E.O. 24 to achieve an eighty (80) percent reduction in GHG emissions below 1990 levels by 2050,[22] includes recommendations regarding time-of-use pricing. While still not requiring time-of-use pricing, the Interim Report addresses the issue within one of its ten policy options for the Residential, Commercial/Institutional and Industrial Sector (RCI). Policy Option RCI-10[23] is the policy of Rate Restructuring and Flexible Metering, and calls for expanding the requirement of time-of-use pricing to smaller commercial entities and to enact legislation requiring time-of-use pricing for residential customers.

- The Climate Action Plan Interim Report also addresses time-of-use pricing's impact on the utilization of solar energy.[24] It forecasts the cost of solar energy to decrease over time and that future analysis will need to be undertaken to evaluate its benefits under time-of-use pricing.

- Time-of-Use pricing was also addressed within the 2009 State Energy Plan, which was created pursuant to Governor Paterson's Executive Order 2 and was released in December 2009.[25] Under the 2009 State Energy Plan, it is believed that if customers were able to monitor their peak energy usage levels in real time, they would better be able to conserve energy and increase usage during non-peak times. But, unlike the 2009 Report's recommendation to require time-of-use pricing for all customers, the State Energy Plan focuses on studying whether or not the requirement of time-of-use pricing would be beneficial to residential customers and what difficulties might be encountered.

- The New York State Smart Grid Consortium (NYSSGC), instated July 22, 2009, is an effort to bring major energy contributors together to work toward the development of the smart grid in New York.[26] Time-of-use pricing is a component of future smart grid plans as it involves transforming the electric grid to reflect current technologies, thereby creating greater energy efficiency. On September 17, 2010, NYSSGC released a response to the PSC's July 16, 2010 inquiry into smart grid policies[27]. In the response, time-of-use pricing is referenced as an option which should be available to energy consumers so as to encourage greater efficiency and to reduce peak market price for all consumers.

4. Provide Incentives for the Installation of Smart Meters

The 2009 Report recommended that New York provide incentives to power companies or energy service companies for the installation of smart meters. As of the time of the report, the PSC allowed customers to install such meters, but it was required only for New York's largest and industrial electric customers.

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22 Climate Action Plan, Interim Report (November 9, 2010), http://www.nyclimatechange.us/ewebeditpro/items/O109F24144.pdf.

23 *Id.* at 6-30.

24 *Id.* at 6-24.

25 David Paterson, *Executive Order 2*, State Energy Plan (December 2009), http://www.nysenergyplan.com/final/New_York_State_Energy_Plan_VolumeI.pdf.

26 New York State Smart Grid Consortium, (July 22, 2009), http://nyssmartgrid.com/consortium.html.

27 New York State Smart Grid Consortium, *Case 10-E-0285 – Proceeding on Motion of the Commission to Consider Regulatory Policies Policies Regarding Smart Grid Systems and the Modernization of the Electric Grid* (September 17, 2010), http://nyssmartgrid.com/download/thoughts/psc_responses_to_the%20questions-final.pdf.

Given the uncertainty at the time of whether or not the installation of smart meters would be cost-effective, the 2009 Report recommended providing incentives to power companies or energy service companies who installed smart meters.

Update:

No significant progress has been made regarding incentives for the installation of smart meters since the 2009 Report. As with time-of-use pricing, smart metering is mentioned within RCI-10 in the Interim Report of New York's Climate Action Plan.[28] The Interim Report recommends a cost-benefit analysis of smart metering so as to determine the extent to which smart meters should be installed throughout the state. The Interim Report also encourages using smart meter pilot programs to determine the need for additional programs and/or to create the best programs and terms for adoption in New York.[29]

The 2009 New York State Energy Plan also discusses smart meters, specifically how LIPA was installing the meters for 200 residential and commercial customers to determine how such a product can be integrated into the energy system.[30]

5. Require Electric Sub-Metering in All Buildings

The 2009 Report recommended an amendment to the Public Service Law in New York requiring all multi-unit buildings to be sub-metered, allowing a building owner to bill tenants for individual measured electric usage. It was believed that the implementation of sub-metering would promote greater energy conservation and efficient use by consumers.

Update:

There been no legislation since the 2009 Report requiring electric sub-metering in all buildings. As at the time of the 2009 Report, building owners could petition the PSC to require sub-metering in their particular building, but sub-metering was not a requirement; in fact, the requirement of sub-metering was prohibited. Public Service Law 16 NYCRR Part 96 is still in effect, prohibiting the requirement of residential sub-metering.[31] Additionally, RCI-2, a policy recommended in the Climate Action Plan's Interim Report, addresses energy efficiency incentives.[32] The Interim Report recommends a regional and national survey of sub-metering to determine which practices would be best to implement in New York.[33]

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[28] Climate Action Plan, Interim Report (November 9, 2010), http://www.nyclimatechange.us/ewebeditpro/items/O109F24144.pdf at 6-31.

[29] *Id*. at 6-31.

[30] David Paterson, *Executive Order 2*, State Energy Plan (December 2009), http://www.nysenergyplan.com/final/New_York_State_Energy_Plan_VolumeI.pdf at 36.

[31] Public Service Law 16 NYCRR Part 96, http://www3.dps.state.ny.us/N/nycrr16.nsf/Parts/35C27BA3E98C80E085256FC7004FC859?OpenDocument.

[32] Climate Action Plan, Interim Report 6-31 (November 9, 2010), http://www.nyclimatechange.us/ewebeditpro/items/O109F24144.pdf.

[33] *Id.*

6. Amend the Energy Code to Cover More Building Renovations

The 2009 Report observed that many renovations do not need to meet current Energy Code requirements because, under a New York State regulation[34] (which does not conform to national and international codes), the rules only apply to renovations involving the replacement of more than fifty (50) percent of a building subsystem. New requirements are also banned that would cost more than the present value of the expected energy savings over a 10-year period. The 2009 Report recommended that the currently high thresholds for the applicability of the Energy Code should be lowered, and that the exemption for historic properties should also be narrowed. New York is the only state that incorporates the fifty (50) percent rule and the ten-year payback requirement. These are not present in the IECC, which is the model code for New York as well as many other states.

To address these shortfalls, DOS crafted an amendment in the form of a bill which was introduced in the State Assembly and Senate in 2008. These changes would amend Article 11 to remove the fifty percent threshold, remove the requirement for a 10-year payback studies for changes to the ECCC, and would reword the historic exemption, changing the word "property" to the word "building," therefore retaining exemptions to existing historic buildings rather than entire historic districts. This bill did not advance out of the Assembly Ways and Means Committee. The 2009 Report recommended that the State legislature enact a similar law that eliminates these exemptions.

Update:

Effective December 28, 2010, the State Fire Prevention and Building Code Council established the Energy Conservation Construction Code of New York (ECCCNYS-2010) as the Energy Code in New York State.[35] August amendments to ECCC-NYS removed the "fifty percent rule," which had exempted renovations, additions, and alterations from compliance with state energy codes unless the project affected more than half of the building.[36]

The new code is based on the 2009 IECC model code and the 2007 ASHRAE guidelines, for residential and commercial buildings respectively, in compliance with ARRA.[37] (ARRA requires that States receiving economic stimulus funding for energy related programs adopt code requirements at least that stringent,

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[34] The State Energy Code Act (Article 11 of the Energy Law) applies to new building construction and to renovations of existing buildings only if the renovation is "substantial" - *i.e.*, only if the renovation involves the replacement of more than fifty (50) percent of a "building subsystem" such as exterior walls, floors, and ductwork. Thus, many renovations and building system replacements that do not meet this threshold are not required to comply with the Energy Code. Article 11 also prohibits any amendment of the Energy Code imposing new requirements that would cost more than the present value of the expected energy savings over a 10-year period. Article 11 further provides a blanket exemption from the Energy Code for any property that is on the National or State registry of historical places and for any "property" that is determined to be eligible for listing on the State Registry by the Commissioner of Parks, Recreation and Historic Preservation.

[35] *Notice of Adoption: Update to the Uniform Fire Prevention and Building Code and State Energy Conservation Construction Code*, DOS, http://www.dos.state.ny.us/CODE/noticadopt10.htm.

[36] *2010 ECCCNYS Effective, "50 Percent Rule" Removed,* ONLINE CODE ENVIRONMENT & ADVOCACY NETWORK, http://bcap-ocean.org/news/2011/january/06/2010-ecccnys-effective-%E2%80%9C50-percent-rule%E2%80%9D-removed.

[37] *2010 Energy Conservation Construction Code of New York State, DOS,* http://www.dos.state.ny.us/code/energy code/Code.htm.

in its attempt to spark economic development and energy conservation, and further requires that States receiving ARRA funding must bring ninety percent of their buildings into compliance with these codes by 2017.)[38]

The code "addresses the design of energy-efficient building envelopes and the installation of energy-efficient mechanical, lighting and power systems through requirements emphasizing performance. This comprehensive code establishes minimum regulations for energy-efficient buildings using prescriptive and performance-related provisions. It makes possible the use of new materials and innovative techniques that conserve energy."[39]

New York State has expressed its commitment to ensuring that at least ninety percent of its residential and commercial buildings comply with ECCCNYS-2010 by 2017.[40] To fulfill this plan, NYSERDA launched training and enforcement support initiatives throughout the State. These efforts will assist design and construction industry professionals in creating compliant buildings, and will assist local governments in enforcement of ECCCNYS-2010. In addition, DOS will enact regulations annually to measure compliance with this Code.[41]

7. Require Schools to Meet Green Building Standards

The 2009 Report recommended New York's adoption of mandatory green building standards for new and substantially renovated school buildings based either on the State's NY-CHPS guidelines or on New York City's Green Schools Guide. At the time of the 2009 Report, New York was without a comprehensive state-wide standard of green building for schools but instead had a voluntary system in place for the state and a required system for NYC.

Update:

Currently, New York is still without a state-wide school green building standard, and continues to operate under a voluntary system, NY-CHPS.[42] New York City, for its part, requires specific green building standards under Local Law 86.[43]

8. Adopt Conservation Requirements for Water and Wastewater Treatment Plants

The 2009 Report recommended that New York State follow the lead of the U.S. Environmental Protection Agency (EPA) and adopt minimum energy conservation requirements for water and wastewater treatment plants. The 2009 Report also recommended that New York State consider adopting more aggressive energy conservation requirements when these plants are funded through the New York State Environmental Facilities Corporation (EFC).

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[38] *State Building Code Council Adopts New Rules Promoting Energy Conservation and Building Safety,* DOS, http://www.dos.state.ny.us/pres/pr2010/4-2buildingcode.html.

[39] *2010 Energy Conservation Construction Code of New York State, DOS,* http://www.dos.state.ny.us/code/energy code/Code.htm.

[40] *Welcome to the New York State Department of State Energy Code Page,* DOS, http://www.dos.state.ny.us/code/ energycode/nyenergycode.htm.

[41] *Energy FAQ's,* DOS, http://www.dos.state.ny.us/code/energycode/FAQ.htm.

[42] NY-CHPS Criteria, http://www.chps.net/dev/Drupal/node/36.

[43] Local Law 86. (NY 2005).

Update:

NYSERDA initiated Wastewater Energy Efficiency activities (WWEP) in 2009 under the Commercial, Industrial, Municipal, and Institutional (CIMI) Program. "CIMI programs offer a set of coordinated initiatives designed to achieve cost-effective CO_2 reductions by providing technical support and implementation assistance to existing facilities and new construction projects. "[44] Since 2009, federal economic stimulus funds have been secured to augment efforts to finance new water and wastewater infrastructure through the Clean Water State Revolving Fund (SRF) Program.[45] Additionally, projects financed with SRF funds "will be constructed to high energy-efficiency standards, thus minimizing carbon emissions and improving economic and environmental performance."[46] NYSERDA and the EFC have completed a number of steps necessary to implement the WWEP; including finalizing 24 FlexTech (technical assistance) studies. "The FlexTech studies identified and recommended the installation of energy-efficient measures that would contribute to an estimated savings of 14,600 MWh and 52,748 MMBtu when compared to a standard design. These studies were used by EFC to help leverage approximately $104 million from the U.S. EPA's [ARRA] Green Project Reserve funds on behalf of the municipalities." [47]

Another development in wastewater energy efficiency improvements includes the efforts undertaken by NYPA. In 2009, NYPA announced a campaign to reduce energy demand from water and wastewater treatment facilities by twenty percent by 2015. [48] To achieve the goal NYPA is promoting on-site solar electric systems, bio-gas recovery to supply on-site systems and energy efficiency measures. Some NYPA initiatives to date include the installation of eight fuel cells at four wastewater treatment plants operated by the New York City Department of Environmental Protection, a single fuel cell and solar PV system at a wastewater treatment facility in Yonkers, and two microturbines that burn waste-gas at a wastewater treatment facility in Niagara County. [49] Other initiatives include over $4 million in efficiency upgrades at a wastewater treatment facility in Suffolk County (which will save an estimated $388,000 per year) and over $2 million in upgrades of a chiller plant at a water pollution control plant in Nassau County (which will save an estimated $158,000 per year).[50]

9. Reinstate Energy Planning Requirements in Article Six of the Energy Law

The 2009 Report recommended that the New York State Legislature amend the State's Energy Law to reinstate the State Energy Planning Board, which had expired pursuant to a sunset clause in previous versions. This Board – comprising representatives from the State's numerous agencies – would produce energy demand reports detailing forecasted demand, supply capacity, resource mix, and recommendations necessary to meet demand.

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[44] NYSERDA, *New York RGGI Funded Programs, Status Report, Quarter Ending December 31, 2009* at 4-1 (Feb. 2010), *available at* http://www.nyserda.org/RGGI/4th_quarter_2009_report.pdf.

[45] *Id*.

[46] *Id*.

[47] *Id*.

[48] *Energy Services for Water and Wastewater Facilities*, NEW YORK POWER AUTHORITY, http://www.nypa.gov/services/ESforWaterandWastewaterFacilities.htm (last visited Jan. 20, 2011).

[49] *Id.*

[50] *Id.*

Update:

In September 2009, the New York State Legislature enacted legislation, subsequently signed by Governor Paterson, formally reinstating the State Energy Planning Board. This legislation does not include any sunset provisions.[51] This Board is charged with crafting a comprehensive State Energy Plan by 2013, with the ultimate goal of providing NY residents "with reliable, economical, and clean energy resources."[52] Section 6-102 also authorizes the establishment of regional planning councils that will work with the Planning Board to gauge stakeholder concerns and provide recommendations for formulating the final State Energy Plan.[53]

LAND USE

10. Amend SEQRA Regulations to Incorporate GHG Emission Considerations

SEQRA requires all State and local governmental agencies to evaluate environmental impacts resulting from discretionary decisions, including actions they might approve, fund or undertake. For most agency actions, an agency first completes an initial review of the project using an Environmental Assessment Form (EAF). If a project is found to have the potential for any significant environmental impacts, the agency is required to complete an Environmental Impact Statement (EIS) to establish a comprehensive understanding of the potential impacts. DEC has required analysis of climate change issues in certain EISs where it is the lead agency, but has not yet required such analysis in all EISs. However, DEC is the lead agency in only a small minority of actions.

Although New York is in the initial stages of updating requirements under SEQRA to incorporate climate change considerations, it has fallen behind Massachusetts, California and Washington, three states with environmental impact review laws similar to SEQRA. In September 2008, DEC circulated preliminary drafts of two SEQRA-related documents: an updated version of the Environmental Assessment Form, requiring agencies to document GHG emissions and perform more thorough energy analyses, and a technical guidance tool to facilitate the inclusion of energy use and climate change in EISs.

The proposed revision to the EAF, which is still undergoing informal review by interested groups, contains a significantly more comprehensive section on air quality impacts compared to the existing form, and asks agencies to document projected emissions of specific greenhouse gases and pollutants. In addition, the proposed EAF revisions also mandate more thorough energy analyses, requiring agencies to consider the electricity demand as well as the specific fuel type and consumption rates of a project. The existing EAF simply asks if the proposed action will cause more than a five percent increase in the use of any form of energy.

The second proposed document is a technical guidance tool to facilitate the inclusion of energy use and climate change in an EIS. After a State agency has determined that the scope of an EIS will contain energy use or GHG emissions, this document provides guidance to the agency in developing the EIS with

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[51] N.Y. ENERGY LAW §6-102, Art. 6 (2010). The statutory language outlines both the composition of the Board and some rules of procedure.

[52] 2013 NYS Energy Plan, nysenergyplan.com.

[53] § 6-102(2).

regard to the following: establishing boundaries for the assessment; quantifying direct and indirect CO_2 emissions; quantifying emissions from waste generation; quantifying methane emissions from landfills; and analyzing mitigation options.

The 2009 Report recommended that DEC move forward with adoption of EAF revisions and a technical guidance document. Although the 2009 Report did not necessarily endorse the details of DEC's current proposals, it expressed the importance of taking formal action to define how climate change should be considered under SEQRA. DEC was also urged to amend its SEQRA regulations (Part 617) so that some discussion of climate change (at a level appropriate in light of project characteristics) is more explicitly required for all actions undergoing EIS review. In addition, the 2009 Report recommended that DEC consider amending the SEQRA regulations, 6 NYCRR 617.11(d)(5), to provide that the findings statements issued by agencies upon the completion of a final EIS should also include a finding that the selected alternative incorporates cost-effective energy efficiency and renewable energy measures into its design, construction and operation to the maximum extent practicable, consistent with social, economic and other essential considerations. DEC was further urged to explore additional amendments to the findings requirements embodied in Part 617 to more explicitly address GHG emissions as appropriate.

Update:

Understanding that both the short and full Environmental Assessment Forms (EAFs) were ill-equipped to deal with the environmental realities of today, the DEC has proposed revisions to both forms. Comments on these proposed changes will be accepted by the DEC until February 18, 2011.[54] With these revisions, DEC is seeking to modernize these model environmental assessment forms, both by incorporating new technologies and by taking into account environmental realities that were not in the public consciousness when these forms were last amended over 20 years ago.[55]

Structural changes to the EAFs will make information gathering for zoning and planning easier, and will integrate electronic technologies, such as hyperlinks, to allow for easier navigation between these forms and the maps and studies which influence them. They will simplify instructions, include more questions with yes/no answers, and will lessen the duplicity of paperwork by incorporating the determinations of significance.

Substantive changes to the EAFs, of utmost import to this Update, include the EAF's now explicit questioning on "critical environmental subjects that have come to public consciousness since the forms were first created."[56] The forms will now explicitly ask questions regarding a particular action's impacts on a number of emerging environmental issues, such as climate change, energy conservation, smart growth concepts, pollution prevention, and environmental justice.[57]

11. Incorporate GHG Emission Considerations into Local Comprehensive Plans

Land use is a major target to address climate change in New York, largely because higher densities tend to encourage mass transit use and reduce trip lengths. Municipal actions, particularly zoning, are effective ways for municipalities to mitigate and adapt to climate change in the long term. Local

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54 *State Environmental Quality Review Act - Draft Model Short and Full Environmental Assessment Forms,* DEC, http://www.dec.ny.gov/permits/70293.html (includes links to the draft short EAF and long EAF).

55 *Regulatory Impact Statement,* DEC, http://www.dec.ny.gov/docs/permits_ej_operations_pdf/ris.pdf.

56 *Regulatory Impact Statement,* DEC, http://www.dec.ny.gov/docs/permits_ej_operations_pdf/ris.pdf.

57 *Summary Text of Rule,* DEC, http://www.dec.ny.gov/docs/permits_ej_operations_pdf/sumrule.pdf.

governments' comprehensive plans provide a good opportunity to integrate transportation, energy efficiency and land use planning in order to reduce GHG emissions. The 2009 Report recommended that the State Legislature enact a bill amending provisions of the General City Law, the Town Law and the Village Law to provide that municipal comprehensive plans consider GHG emissions as well as adaptation to climate change.

In particular, Section 272-a of New York Town Law, which defines "town comprehensive plans" as the materials, written or graphic, that identify the goals, objectives, principles, guidelines, policies, standards, devices and instruments for the immediate and long term protection, enhancement, growth and development of the town, could be amended to include environmental objectives such as reducing GHG emissions and encouraging energy efficiency. In the same way, General City Law Section 28-a and Village Law Section 7-722 could be amended to take GHG emissions and energy efficiency into account when developing comprehensive plans.

Update:

The proposed amendments to section 272-a of New York Town Law, section 28-a of General City Law, and section 7-722 of Village Law have not been made. In the absence of this measure, however, a local government is not precluded from considering GHG emissions and energy efficiency within a comprehensive plan. The effect of not including such a mandate is simply that local governments are not mandated to do so when creating a comprehensive plan.

The New York State Climate Smart Communities Program, a creation of NYSERDA and DEC, DOS, and PSC,[58] encourages local action, inciting towns, villages, and cities to achieve GHG emissions reductions within their community. Members of this program "pledge to combat climate change" by setting long-term emissions reductions goals, determining how these emissions can be reduced within the community, and by acting to cause these reductions.[59] The program now includes 85 communities,[60] and six of these member communities have chosen to achieve their goals through "sustainable transportation, climate change adaptation, and energy planning." The communities of Bedford, Rhinebeck, and Ossining have specifically involved GHG emissions reductions goals in their comprehensive plans.[61]

12. Encourage Wind Energy Projects, Including Those Located Offshore

The 2009 Report recommended that the State adopt a policy of broad support for wind energy development and include statewide goals within its new renewable portfolio standards. The 2009 Report noted that the potential for expanded wind resource development is particularly attractive for offshore locations, and should be promoted by the government.

Update:

While New York did not include a specific goal for wind energy development as a separate requirement of its new RPS, the State has sponsored a number of initiatives aimed at increasing wind capacity under the general framework of its RPS mandate. NYSERDA's solicitations as of March 2010 have resulted in

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58 *Focus on Local Government/Municipalities,* NYSERDA, http://www.nyserda.org/municipalities/default.asp.

59 *Climate Smart Communities,* DEC, http://www.dec.ny.gov/energy/50845.html.

60 *List of Climate Smart Communities,* DEC, http://www.dec.ny.gov/energy/56876.html.

61 *Case Studies: Develop a Local Climate Action Plan*, DEC, http://www.dec.ny.gov/energy/68191.html.

thirty-nine large-scale generators participating in the RPS, fourteen of which are wind farms.[62] NYSERDA is currently working on developing over 425MW of wind power in coordination with a number of energy developers.[63] Moreover, NYSERDA is continuing to offer wind prospecting, site evaluations, mapping and forecasting, education, and other feasibility services for interested utility-scale wind developers,[64] in addition to a suite of incentives for small-scale, customer-sited wind turbines.[65]

There have been a number of other encouraging developments with regard to offshore wind. In March 2009, Consolidated Edison and LIPA jointly issued an *Offshore Wind Power Integration Project Feasibility Assessment*.[66] This report concluded that certain locations in the Atlantic Ocean offered the potential for over 700 MW of installed offshore wind capacity. Subsequently, the Long Island-New York City Offshore Wind Collaborative[67] filed an interconnection application with the New York Independent System Operator (NYISO) to achieve integration of those 700 MW by 2015.[68] The proposed location of this site is expected to be aligned southwest of the Rockaway Peninsula,[69] and would initially aim for 350 MW of generation. This generating capacity would most likely be available by 2016 or 2017, displacing about 540,000 tons of CO_2 annually.[70] The Collaborative continues to conduct preliminary environmental, economic, and technical studies, apply for necessary permits, and generally work to satisfy state and federal requirements. New York City Mayor Bloomberg has already applied to the federal Bureau of Ocean Management, Regulation and Enforcement (BOEMRE) for a lease of the land required beneath the ocean.[71]

NYPA also announced in April 2009 its intent to explore wind development for both Lake Erie and Lake Ontario, and issued a request for proposals for the Great Lakes Offshore Wind Project (GLOW).[72] The RFP resulted in five proposals – for at least 120 MW (and no more than 500 MW) – which are currently under review by NYPA.[73] Developers are to be selected by early 2011, with construction slated for two years subsequent pending environmental and regulatory reviews and other logistical hurdles.

The recent announcement by Google and Good Energies of a proposed $5 billion, 350 mile transmission "backbone" for future offshore wind farms in the Atlantic Ocean should enhance prospects for increased

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62 The New York Renewable Portfolio Standard, http://www.nyserda.org/rps/index.asp.

63 Large Wind Farm Developments, http://www.powernaturally.org/Programs/Wind/UtilityScale_LargeWind.asp?i=8.

64 *Id.*

65 On-Site/Small Wind Incentives, http://www.powernaturally.org/Programs/Wind/incentives.asp.

66 CON EDISON & LIPA, JOINT CON EDISON – LIPA OFFSHORE WIND POWER INTEGRATION PROJECT FEASIBILITY ASSESSMENT (2009), *available at* http://www.linycoffshorewind.com/PDF/Feasibility%20Study.pdf.

67 About the Offshore Wind Farm Partnership, http://www.linycoffshorewind.com/about.html. The Collaborative is a public-private partnership comprised of Con Edison, LIPA, the New York Power Authority, the New York City Economic Development Corporation, NYSERDA, the Port Authority of New York & New Jersey, and the Metropolitan Transportation Authority. The purpose of the Collaborative is to "assess the feasibility and advance the development of the Long Island-New York City Offshore Wind Project." *Id*.

68 *Id*.

69 Frequently Asked Questions, http://www.linycoffshorewind.com/faq.html.

70 *Id.*

71 Carol Tang, *An offshore wind project is coming to N.Y. state, officials meet for first time*, EXAMINER, Nov. 20, 2010, *available at* http://www.examiner.com/energy-industry-in-new-york/an-offshore-wind-farm-is-coming-to-new-york-state-officials-meet-for-first-time.

72 Great Lakes Offshore Wind Project (GLOW), http://www.nypa.gov/NYPAwindpower/GreatLakesWind.htm.

73 *Id*.

offshore wind development along the entire Atlantic seaboard.[74] The underwater cable, which would offer a capacity of 6,000 MW, could significantly generate new development and investment opportunities for New York wind capacity.[75]

VEHICLES & TRANSPORTATION

13. Strive for a Ten Percent Reduction in Vehicle Miles Traveled

The 2009 Report urged New York to strive for a ten percent reduction in vehicle miles traveled (VMT) below business as usual within 10 years, and for the State to continue its efforts to reach this goal. Achieving this goal would result in a reduction of approximately 2.75 million metric tons of CO_2 emissions in 2020.[76]

Update:

The Task Force had incorporated the work of the Governor's Renewable Energy Task Force (RETF) into the 2009 Report. RETF essentially recommended that the State convene an inter-agency task force headed by DEC to develop a strategy to reduce VMT, and further proposed the development of an integrated plan to achieve a statewide target of a ten percent reduction in VMT from projected levels in 10 years.

The RETF made a number of additional recommendations. First it suggested facilitation of intermodal transportation options and support of local initiatives. Since the 2009 Report, NYSDOT has submitted federal Transportation Investments Generating Economic Recovery (TIGER) grant applications in efforts to boost intermodal transit development in the State.[77] NYSDOT helped to facilitate the submission of over 60 TIGER applications. It submitted nine of its own applications and also developed helpful resources to assist program sponsors who submitted applications. Most notably, NYSDOT's Moynihan Station Project – a large intermodal transit hub – received $83 million in TIGER funding. The RETF also recommended the use of location-efficient mortgages, which are low-cost mortgages for people in areas that are close to public transportation or where they can walk instead of drive. Mortgages of this type do not currently exist in New York State.

With respect to the recommendation of the 2009 Report to convene a separate specialized task force headed by DEC to develop a strategy to reduce VMT by ten percent over business as usual within ten years, in 2009, NYSERDA and NYSDOT jointly funded a dozen transportation sector proposals to help achieve the VMT reduction target set by the RETF Report. Some of the recommendations made by the RETF have not been implemented, however. The State has yet to implement congestion pricing, for example. Although congestion pricing was part of Mayor Bloomberg's PlaNYC sustainability plan, the

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[74] *The wind cries transmission*, OFFICIAL GOOGLE BLOG, Oct. 11, 2010, *available at* http://googleblog.blogspot.com/2010/10/wind-cries-transmission.html.

[75] Matthew Wald, *Offshore Wind Power Line Wins Backing*, N.Y. TIMES, Oct. 12, 2010, at A1.

[76] *Scenario Analysis of NYS VMT Goal*, New York State Climate Action Council, available at http://www.nyclimatechange.us/ewebeditpro/items/O109F23556.pdf.

[77] *Transportation Investment Generating Economic Recovery (TIGER)*, NYSDOT, https://www.nysdot.gov/recovery/sponsors/tiger.

State legislature failed to vote on the congestion pricing plan, thereby forfeiting federal funds that were available for a congestion pricing program. Congestion pricing remains one of the few available options to reduce VMT by reducing New York City's traffic congestion and boosting public transit funding.

The RETF also suggested providing tax incentives for transit-oriented development (TOD). Although there are currently no tax incentives for TOD, technical support programs for TOD have been implemented in various parts of the State. One regional TOD program – the Linkage Planning Program, implemented by the Capital District Transportation Committee (CDTC)[78] – provides funding for consultant or CDTC staff technical assistance for joint regional-local planning initiatives that link transportation and land use. The program implements a regional long-range transportation plan, which calls for reducing regional VMT. So far, the program has funded 66 plans through roughly $4.2 million in program funds since 2000. Funds are a combination of federal, state and local funds.

NYSDOT has also sponsored TOD program of its own – the Tappan-Zee Bridge/I-287 Corridor Project's TOD technical assistance program.[79] The Tappan Zee Bridge/I-287 Corridor Project is a multi-faceted technical assistance program on TOD to assist local communities in the two counties the Project will impact most directly. The initiative, called "Transit-oriented development (TOD) – Building Quality Communities around Transit," has the same intent as the State's Smart Growth initiative.

Recently, the Smart Growth Cabinet was continued by Governor Andrew Cuomo.[80] Executive Order No. 2, issued by Governor Cuomo, continued the Smart Growth Cabinet, created by former Governor Eliot Spitzer. The Cabinet comprises representatives from several State agencies that affect growth, development and land use. The Executive Order directs the Cabinet to achieve two important goals: (1) to ensure that state agency practices conform to Smart Growth principles; and (2) to develop a set of state policy initiatives that will help communities achieve Smart Growth on the local level.

On August 31, 2010, Governor Paterson signed into law the Smart Growth Public Infrastructure Policy Act, which is intended to address sprawl by requiring certain state agencies to approve, undertake and fund infrastructure projects in a manner that is consistent with smart growth principles. The new legislation will affect a variety of projects throughout the state. The Act is codified as new Article 6 of the Environmental Conservation Law ("ECL") and became effective on September 29, 2010.[81]

The RETF also recommended increasing investment in public transit, establishing a dedicated funding stream for alternative transportation, and implementing pay-as-you-go insurance in New York State. On January 5, 2011, NYCDOT issued a revised Request for Expressions of Interest (RFEI) to invite interested vendors to submit information to the New York City Department of Transportation (NYCDOT) about pay-as-you-drive insurance.[82] There are currently no explicit regulations against pay-as-you-drive insurance

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[78] *CDTC Linkage Program*, Capital District Transportation Committee (2011), http://www.cdtcmpo.org/linkage.htm.

[79] *Transit-Oriented Development (TOD) - Building Quality Communities around Transit*, New York State, Tappan Zee Bridge/I-287 Environmental Review (2009), http://www.tzbsite.com/public-involvement/transit-oriented-development/transit-oriented-dev-intro.html.

[80] Executive Order No. 2, Review, Continuation and Expiration of Prior Executive Orders, Governor Andrew M. Cuomo, Governor of the State of New York (Jan. 3, 2011), available at: http://www.governor.ny.gov/executiveorder/2.

[81] Smart Growth Environmental Review of Public Infrastructure Projects Now In Effect, Legal Alert!, Hiscock & Barclay, LLP (Oct. 2010), http://www.hblaw.com/pdf/M&LU10-01-10.pdf; N.Y. Envt'l Conserv. L. § 6 (2010).

[82] New York City Department of Transportation, Request for Expressions of Interest Regarding Pay As You

policies in New York, but they individually require state approval.[83] One insurance company – Progressive – currently offers a pay-as-you-drive insurance policy, which is called Snapshot.[84]

14. Consider Feebates for the Purchase of New Vehicles

The 2009 Report recommended that legislation be considered to formally impose fees and offer rebates to strategically incentivize the purchase of more fuel efficient vehicles. These "feebates" represent an adjustable scale of fees and rebates that would apply to the purchase of new motor vehicles. In essence, a fee is imposed on new vehicles with low fuel economy, while a rebate is given to new vehicles that have high fuel economy. In addition to reducing oil consumption and GHG emissions, feebates are an effective policy tool because they do not require new increases in technology, can apply to all vehicle size classes, and allow for continuous technological improvement. In the most basic form of the program, once the target has been selected – e.g., fuel consumption – two parameters must be set: (1) the amount of the payments (such as dollars per fuel consumption rate); and (2) the pivot point that divides those who pay a fee and those who are paid in the form of a rebate. Within the last few years, attempts have been made to implement a feebate program in New York without success. A feebate bill would foster continuous and significant improvement in vehicle emission characteristics while strongly discouraging the sale of dirty vehicles.[85]

Update:

As of January 11, 2011, New York State has not implemented any new rebates or tax incentives for purchase of more efficient vehicles, nor has it imposed fees on new vehicles with low fuel economy. California is one of the only states (if not only state) seriously considering a feebate program – its Air Resources Board is commissioning a study analyzing the effect of feebate programs.[86]

Despite failing to implement a feebate program, New York has other programs in place to incentivize the purchase of Alternative Fuel Vehicles (AFVs). NYSDOT continues to add eligible vehicles to Clean Pass program.[87] Clean Pass is an innovative program that allows eligible low-emission, energy-efficient vehicles to use the 40-mile Long Island Expressway High Occupancy Vehicle (LIE/HOV), regardless of the number of occupants in the vehicle. DEC has recently added the following vehicle models to the eligibility list:

- 2011 Toyota Prius
- 2011 Nissan Leaf

Drive Insurance in New York City (Jan. 5, 2011), http://nyc.gov/html/dot/downloads/pdf/122110_payaydrive_rfei.pdf.

[83] Jeremy Olshan, *Pay-as-you-drive insurance revs up*, NEW YORK POST (Dec. 28, 2010), http://www.nypost.com/p/news/local/pay_as_you_drive_insurance_revs_j6iIDbfWSwYLsShuioOtuN.

[84] News Release, Progressive, Better New York drivers pay less for car insurance with one-of-a-kind program from Progressive (Dec. 6, 2010), http://newsroom.progressive.com/2010/December/new-york-snapshot-discount.aspx.

[85] A proposed plan under the New Jersey Global Solutions Act was circulated for public comment in December 2008 that mentions feebates as a way to reduce GHG emissions in the state. New Jersey has yet to implement feebates.

[86] *Feebates Research Contract*, California Air Resources Board (May 26, 2010). http://www.arb.ca.gov/research/econprog/feebates/feebates.htm.

[87] *New York's Clean Pass Program*, NYSDOT (Nov. 24, 2010), https://www.nysdot.gov/programs/clean-pass.

NYSERDA has also joined with the Electric Power Research Institute to conduct an engineering study of the effects that plug-in hybrid vehicles (PHEVs) might have on the State's electrical grid.

15. Encourage Government Purchasing of Alternative Fuel Vehicles

Transportation accounts for 67 percent of all oil consumed in the United States. State use of Alternative Fuel Vehicles (AFVs) can significantly reduce GHG emissions while curbing government expenditures on petroleum-based fuel. The 2009 Report recommended an expansion in scope of the pre-existing state vehicle purchasing requirement, from only light-duty vehicles to medium and heavy vehicles. Moreover, additional state assistance should be allocated to fund efficient municipal purchasing.

Executive Order 111 (E.O. 111) mandates that by 2010 State agencies may purchase only light-duty AFVs. Executive Order 142 allows State agencies to comply with E.O. 111 by substituting biodiesel purchases for AFVs. However, these executive orders do not apply to municipalities. State aid to municipalities flows through a variety of grants administered by NYSERDA, which has funded AFV infrastructure projects, municipal bus purchases, and AFV consulting services. However, most of NYSERDA's grants are limited in size and focus. For example, NYSERDA has a permanent program for a 100 percent reimbursement for the incremental (i.e. additional) costs of purchasing a clean-fueled vehicle only with respect to municipal buses.[88] If municipalities want to apply for grants with respect to other vehicles, they must do so either through NYSERDA's Clean Cities Program or on a case-by-case basis.[89] The Clean Cities Program allows municipalities to design their own AFV programs and then seek partial reimbursement from NYSERDA. Only six New York municipalities currently participate in this program.[90] In addition, NYSERDA has a program that provides grants to private AFV fleets only with respect to New York City.[91]

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[88] The Clean-Fueled Bus Program provides funds to state and local transit agencies, municipalities, and schools for up to 100% of the incremental cost of new alternative-fuel buses, and a combination of a Clean Fuel Bus Project and a directly associated Clean Fuel Infrastructure project. Eligible Vehicles include any motor vehicle with a seating capacity of 15 or more passengers in addition to the driver and used for the transportation of persons on public highways that is powered by compressed natural gas (CNG) including dual-fuel technology, propane, methanol, hydrogen, biodiesel or ethanol, or uses electricity, including electricity either stored or generated on board, as a primary motive force (e.g. hybrid-electric). Dual fuel CNG engines must be factory built and certified or a new diesel engine converted to dual-fuel prior to commit to a fuel mix that results in 75% or greater use of CNG during typical operation of the bus. The emissions reduction potential of alternative-fuel buses is evaluated for project selection.

[89] The Clean Cities Challenge is a funding opportunity to encourage projects that accelerate the introduction of alternative fuel vehicles (AFVs) in Clean City stakeholder fleets. Eligible proposers must be stakeholders or members of a US Department of Energy designated Clean City Organization in New York State with fleets of ten or more light-, medium-, or heavy-duty vehicles. These vehicles must be owned, leased, or otherwise operated by municipal agencies; school districts; businesses and corporations; and not-for-profit institutions, organizations, and associations.

[90] Alternative Fuel Vehicle Program, NYSERDA, http://www.nyserda.org/programs/transportation/afv.asp.

[91] Alternative Fuel Vehicle Program, NYSERDA, http://www.nyserda.org/Programs/transportation/afv.asp (last visited Jan. 11, 2011). The New York City Private Fleet Alternative-Fuel/Electric Vehicle Program helps private sector companies and non-profit entities operating vehicles within the five boroughs of New York City to acquire AFVs. NYSERDA, in partnership with the New York City Department of Transportation (NYC DOT), seeks projects that would maximize the environmental, energy, and economic benefits of accelerating these vehicles and the corresponding infrastructure into private fleets in New York City. Federal Congestion Mitigation and Air Quality (CMAQ) funds are awarded on a competitive basis for up to 50% of the incremental cost of new light-duty natural gas or electric vehicles, and up to 80% of the incremental cost for new or converted medium and heavy-duty

Update:

Some progress has been made in boosting government procurement of AFVs. In 2009, New York was awarded two U.S. Department of Energy (DOE) grants totaling more than $28 million through ARRA to assist school districts, local governments, public universities, and private businesses in purchasing clean fuel and alternative fuel vehicles and associated infrastructure.[92] The $13.3 million Department of Energy Clean Cities grant to NYSERDA came with an $18.8 million cost-share pledge from NYSERDA's partners to purchase 307 alternative fuel vehicles and eight infrastructure projects across the State. The Greater Long Island Clean Cities Coalition (GLICCC) was awarded a grant of $14.99 million to deploy five alternative fuel stations and 179 alternative fuel vehicles in Nassau and Suffolk Counties.

The NYSERDA and the New York City Department of Transportation announced on April 2, 2009 that 14 companies were awarded over $6.6 million to introduce compressed natural gas (CNG), electric, and hybrid-electric vehicles to their fleets.[93] The funding was awarded through the New York City Private Fleet Alternative Fuel/Electric Vehicle Program, which is designed to assist private and not-for-profit fleets operating in New York City to purchase new vehicles, or re-power vehicles with alternative fuels or advanced technologies that improve efficiency and reduce emissions.

NYSERDA also announced a competitive solicitation to fund energy efficiency, renewable energy, and AFV projects.[94] $74 million was made available on a competitive basis to fund the installation of energy efficiency measures, renewable energy systems, and for the introduction of alternative fuel vehicles into fleets. This program provides incentives for the installation of eligible energy efficiency measures, renewable energy systems, and purchase of alternative fuel vehicles. Included in the program are Light- and medium-duty vehicles fueled by natural gas, propane, hydrogen, or those that use electricity stored or generated on board as the primary fuel.

Additionally, the New York City Clean Fuel Taxi Program[95] allocated Federal Congestion Mitigation and Air Quality (CMAQ) funds towards the purchase of new natural gas taxi cabs or the conversion of gasoline cabs. A partnership including NYSERDA, New York City agencies, KeySpan Energy, Consolidated Edison, and Ford is working together to introduce natural gas taxis into New York City's 12,000 yellow cab fleet. About 300 natural gas taxis have been operated by taxi drivers throughout the city as a result of this program. Natural gas is now available at a growing network of fueling sites around the City.

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dedicated compressed natural gas (CNG), dual-fuel technology optimized to use 80% CNG, electric, or hybrid-electric vehicles, and 50% of the cost of equipment and installation of compressed natural gas (CNG) refueling equipment or electric vehicle charging equipment.

[92] Press Release, NYSERDA, Governor Paterson Announces New York Alternative Fuel Transportation Projects Awarded Stimulus Funds (Aug. 24, 2009), http://www.nyserda.org/Press_Releases/2009/PressReleas20092408.asp.

[93] Press Release, NYSERDA, State-City Award Funds to Curb New York City Vehicle Emissions (Apr. 2, 2010), http://www.nyserda.org/Press_Releases/2009/PressRelease20090204.asp.

[94] Press Release, NYSERDA, NYSERDA Announces Competitive Solicitation to Fund Energy Efficiency, Renewable Energy, and Alternative-Fuel Vehicle Projects (Jul. 30, 2009), http://www.nyserda.org/Press_Releases/2009/PressReleas20093007.asp.

[95] Alternative Fuel Vehicle Program, NYSERDA, http://www.nyserda.org/Programs/transportation/afv.asp (last visited Jan. 11, 2011).

Despite some of the strides made in recent years, New York could broaden incentives and requirements for AFV purchases. E.O. 111 could, for example, include the purchase of medium and heavy use vehicles, unless the purchase of such vehicles is unduly expensive or otherwise not suitable as an AFV. NYSERDA could broaden its grant programs to provide for 100 percent reimbursement of the incremental costs of purchasing other municipal vehicles besides buses and expand its program for grants for private AFV fleets throughout the state. Further, the State Legislature could enact legislation requiring all municipalities to purchase AFV vehicles in instances when the State provides financial assistance or require it in all instances unless it is unduly expensive or otherwise not suitable.

16. Promote Energy-Saving Vehicle Maintenance Techniques

The 2009 Report encouraged the Department of Motor Vehicles (DMV) to promote vehicle maintenance techniques designed to capture efficiencies and foster energy conservation. These vehicle maintenance and driving techniques can have a significant effect on car mileage. Topping off and changing oil when necessary can improve fuel economy by up to ten percent. Replacing a clogged air filter can improve a vehicle's gas mileage by up to ten percent. Keeping tires inflated to at least the manufacturer-recommended pressure can improve fuel economy by up to three percent. These changes are simple and inexpensive ones for drivers to make. The greatest challenge is ensuring that drivers have the necessary information.

Update:

Pursuant to State law and DMV regulation, all motor vehicles more than two model years old, but less than 25 years old, are required to have emissions inspections each year. In addition, all vehicles registered in New York must get a safety inspection every twelve months or when the ownership of a vehicle is transferred. These mandated inspections could be modified to add tire pressure and other factors that affect gas mileage and hence GHG emissions. New York State could also promote the maintenance and driving techniques outlined in the U.S. Department of Energy's online source for fuel economy information.[96] Further, mailings that are sent to motorists advising them to renew their vehicle registrations and drivers licenses could include information on vehicle maintenance, including tips for increasing fuel efficiency. Such information could also be provided to people seeking learner permits and drivers licenses. For persons who renew their drivers' licenses online, a list of vehicle maintenance suggestions could be provided. The information should also be prominently displayed on the DMV website, and could link to further information on air pollution and car emissions provided on the DEC website. Currently, there are no fuel-saving techniques or other information about AFVs available on DMV's website. Finally, driver education courses could include curriculum that teaches students ways to maintain their vehicles that increases fuel efficiency.

[96] *Gas Mileage Tips*, U.S. Department of Energy, http://www.fueleconomy.gov/feg/maintain.shtml (last visited Jan. 11. 2011); *Driving More Efficiently*, U.S. Department of Energy, http://www.fueleconomy.gov/feg/maintain.shtml (last visited Jan. 11. 2011); *Keeping Your Car In Shape*, U.S. Department of Energy, http://www.fueleconomy.gov/feg/maintain.shtml (last visited Jan. 11. 2011).

OTHER INITIATIVES

17. Expand the Regional Greenhouse Gas Initiative

The 2009 Report recommended that RGGI be expanded to apply to additional GHG emitters. (The scope of RGGI is currently limited to electrical generating units with a 25 MW or higher capacity and is designed to achieve a ten percent reduction in GHG emissions by 2018). The 2009 Report further recommended that RGGI should adopt a program more like the Western Climate Initiative which is establishing a two-phase cap and trade program that will apply to around ninety percent of emissions including those from transportation, electricity, industry, residential, and commercial fuel use**.** Additional recommendations included lowering the cap to create a price dynamic that would encourage GHG reductions. The 2009 Report also recommended that RGGI proceeds should not be used for anything other than promoting energy efficiency programs and other such initiatives that reduce GHG emissions.

Update:

Contrary to the recommendations of the 2009 Report, the use of RGGI's proceeds has not been limited to energy efficiency or renewable energy measures. In December 2009, Governor Paterson, as part of his efforts to reduce the State's deficit, authorized the transfer of $90 million in RGGI proceeds to New York's General Fund for the benefit of the state's "long-term fiscal health."[97] In June 2010, NYSERDA adopted an Operating Plan under which auction proceeds must be used for energy efficiency and renewable energy development. The Plan states:

> The CO_2 Allowance Auction Program (at 21 NYCRR Part 507.4(d)) also creates the parameters for use of the proceeds from the sale of allowances, and that will be used to: '. . . promote and implement programs for technologies, and innovative carbon emissions abatement technologies with significant carbon reduction potential.' The Operating Plan was created to be consistent with the above regulatory requirements.[98]

Except for the Green Jobs-Green NY Act of 2009 that allocated $112 million in auction proceeds to building retrofits and workforce training, no comprehensive legislation has been enacted in New York State to codify the limitations on uses to which RGGI auction proceeds can be devoted; in the absence of statutory provision, the existing NYSERDA regulation continues to apply. With respect to possible expansion of RGGI to include other sectors – along the lines of the Western Climate Initiative – and possible actions to adjust the baseline to achieve a greater reduction than ten percent, the RGGI Memorandum of Understanding provides for a 2012 review, and this process is currently underway.[99] If the review takes into account comments made during the process, the RGGI GHG emissions cap may be revised downward – as some stakeholders have pointed out that the RGGI cap is currently overstated by 34 percent and must be corrected to ensure that the goal of a ten percent reduction is based on actual 2009 levels.[100] Other issues considered in the review include the possible collaboration with the

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[97] NYSERDA, OPERATING PLAN FOR INVESTMENTS IN NEW YORK UNDER THE CO_2 BUDGET TRADING PROGRAM AND THE CO_2 ALLOWANCE AUCTION PROGRAM, 3-3 (2010), *available at* http://www.nyserda.org/RGGI/RGGI_Report_June.pdf.

[98] NYSERDA, OPERATING PLAN FOR INVESTMENTS IN NEW YORK UNDER THE CO_2 BUDGET TRADING PROGRAM AND THE CO_2 ALLOWANCE AUCTION PROGRAM, 2-1 (2010), *available at* http://www.nyserda.org/RGGI/RGGI_Report_June.pdf.

[99] E-mail from Jackson Morris, Senior Policy Advisor, Pace Energy and Climate Center, to Adonia David (Tuesday, January 10, 2011, 8:01 EST).

[100] *Materials for RGGI Stakeholder Meetings,* REGIONAL GREENHOUSE GAS INITIATIVE,

Western Climate Initiative and the Midwest Governors' Greenhouse Gas Accord, which would likely involve extension of the coverage of RGGI beyond the electric generation sector.

18. Pursue Carbon Capture and Sequestration (CCS) in New York if Federal Funds are Available

The 2009 Report recommended that New York State consider pursuing the development of carbon capture and sequestration (CCS) in the State to the extent that federal funds are available. The 2009 Report also recommends identifying the legal obstacles to making CCS a viable climate change mitigation option and developing legislative and regulatory solutions to those obstacles.

Update:

Currently, there are no federal funds available for CCS in New York State. The Jamestown CCS demonstration project's application for federal funding for CCS was denied by U.S. DOE in December 2009.[101] At this time there are no other pending CCS demonstration projects in New York that have applied for federal funding. After being denied funding from U.S. DOE three times, it seems clear that the Jamestown project does not have support from U.S. DOE. Additionally, the New York State Legislature has not passed the necessary enabling legislation to allow CCS to be deployed in the State.

19. Promote Green Workforce Development in New York

The 2009 Report recommended promotion of green collar jobs through enhanced education and job training programs within the state, that the PSC adopt the recommendations offered by the Workforce Development and Training Working Group, and continued enhancement of green workforce development by using existing sources of revenue such as additional funding from SBC collections and revenue from RGGI auctions to expand similar educational and job training programs in New York.

Update:

In September 2009, the New York State Legislature passed the Green Jobs/Green New York (GJ/GNY) bill. The bill set up a RGGI funded revolving fund to pay for business and home retrofits.[102] $112 million in RGGI funds were allocated to NYSERDA for implementation of GJ/GNY programs.[103] Additional GJ/GNY funding came from Energy Efficiency and Conservation Block Grant funds under ARRA, awarded by U.S. DOE under its "Retrofit Rampup" (Better Building Grant) program, in which New York State was awarded $40 million (the largest state grant in the U.S.). New York City received $21.4 million and NYSERDA received $18.6 million for statewide financing program (to be integrated with GJ/GNY).[104]

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http://rggi.org/stakeholder_meeting (last visited Jan. 19, 2011).

[101] *US Dept. of Energy Says "No" to Jamestown, NY's Dirty Coal Proposal*, ENVTL. ADVOCATES OF NEW YORK (Dec. 7, 2009), http://readme.readmedia.com/US-Dept-of-Energy-Says-No-to-Jamestown-NYs-Dirty-Coal-Proposal/991537 (last visited Jan. 20, 2011).

[102] *New On-Bill Financing Will Create Jobs, Reduce Energy Costs, and Help Homeowners Afford Weatherization*, NEW YORK STATE SENATE (Apr. 23, 2010), *available at* http://www.nysenate.gov/press-release/new-bill-financing-legislation-will-create-jobs-reduce-energy-costs-and-help-homeowner.

[103] Jeff Pitkin, *NYSERDA: Innovations in Financing Energy Efficiency*, YALE SCHOOL OF MANAGEMENT CARBON FINANCE SPEAKER SERIES (Jan. 12, 2011), *available at* http://cbey.research.yale.edu/calendar/207/1667-NYSERDA-Innovations-in-Financing-Energy-Efficiency.

[104] *Id.*

The PSC authorized $6.6 million in funding in June 2009 for NYSERDA to administer a Workforce Development Program.[105] NYSERDA's goal is to train and certify a workforce to carry out the efficiency programs to meet the EEPS goals. Part of NYSERDA's funding program goes to "training for clean energy careers" in energy efficiency and renewable energy training, professional certification reimbursement, apprenticeships, and internships.[106] In 2009, NYSERDA invested $4 million in a total of twenty-eight training centers.[107] The training centers include community colleges, four year colleges, building trades, and BOCES across the state.[108] Since 2009, over 12,000 workers have been trained through Workforce Development Programs.[109] While the workforce development programs are in their beginning stages, as consumer demand increases NYSERDA anticipates that the training programs will be a key component in meeting the demand with a skilled workforce.[110] In 2010 there were 6,123 residential retrofits and NYSERDA expects significant increases as GJ/GNY outreach and marketing continues to grow.[111] An important component to expanding this involves the availability of financing to homeowners and businesses seeking to make energy efficiency improvements.

For residential and business energy efficiency improvements, NYSERDA has three main financing strategies. The first is a "property assessed clean energy, or PACE" type approach, which is currently on hold.[112] The second is the "On Bill Recovery Financing." In April 2010, the New York State Senate passed GJ/GNY II—the on-bill financing companion legislation to GJ/GNY I.[113] However, the legislation never passed the Assembly during the last legislative session. NYSERDA is continuing to pursue legislation to authorize the use of on bill financing statewide and is working on a pilot program with National Grid in the upstate natural gas market as well.[114] The third, and currently NYSERDA's main financing mechanism, is through "Direct Loans."[115] As part of the direct loan program NYSERDA administers Qualified Energy Conservation Bonds (QECB) (these monies were part of the ARRA money distributed to municipalities across the country. States also received money and NYSERDA's use will go to the GJ/GNY programs.) New York State received a total volume cap allocation of $202.2 million for qualifying projects that can be financed with QECB bonds. This allocation was further suballocated by federal regulations to local governments with populations over 100,000. New York City received $86.7 million, New York State received $20.6 million and the balance was allocated to 37 cities, counties and towns

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105 *Energy Efficiency Training Expansion Getting Underway*, NYSERDA, http://www.getenergysmart.org/GreenJobs/Efficiency/EEPSPlan.aspx (last visited Jan. 19, 2011).

106 *Id*.

107 *Clean Energy Training Program*, NYSERDA, http://www.getenergysmart.org/GreenJobs/Renewable.aspx (last visited Jan. 20, 2011).

108 *Id*.

109 Jeff Pitkin, NYSERDA (Jan. 24, 2011 14:14 EST).

110 Jeff Pitkin, *NYSERDA: Innovations in Financing Energy Efficiency*, YALE SCHOOL OF MANAGEMENT CARBON FINANCE SPEAKER SERIES (Jan. 12, 2011), *available at* http://cbey.research.yale.edu/calendar/207/1667-NYSERDA-Innovations-in-Financing-Energy-Efficiency.

111 *Id.*

112 *Id*.

113 *New On-Bill Financing Will Create Jobs, Reduce Energy Costs, and Help Homeowners Afford Weatherization*, NEW YORK STATE SENATE (Apr. 23, 2010), *available at* http://www.nysenate.gov/press-release/new-bill-financing-legislation-will-create-jobs-reduce-energy-costs-and-help-homeowner.

114 Jeff Pitkin, *NYSERDA: Innovations in Financing Energy Efficiency*, YALE SCHOOL OF MANAGEMENT CARBON FINANCE SPEAKER SERIES (Jan. 12, 2011), *available at* http://cbey.research.yale.edu/calendar/207/1667-NYSERDA-Innovations-in-Financing-Energy-Efficiency.

115 *Id*.

with populations in excess of 100,000. This means that a total of $202.2 million of these bonds can be issued in New York State, but there is the possibility that they could be forfeited if municipalities fail to use them. NYSERDA is working with municipalities to ensure the funds are spent or are able to revert back to the State and roll into NYSERDA's program. To date, four municipalities in New York not using their funding have allowed it to revert back to the state.[116]

20. Encourage the State's Interagency Committee on Sustainability and Green Procurement to be Aggressive in Setting Green Specifications

At the time of the 2009 Report, New York had a State Green Procurement and Agency Sustainability Program in place. This program was instituted by Governor Paterson's Executive Order 4[117] (E.O. 4), which created an Interagency Committee on Sustainability and Green Procurement. The interagency was given the duty of creating an annual list of categories and products to be developed and issued with green specifications for use by state agencies and public authorities in the procurement of commodities, services and technology. Given the leeway the Interagency has in creating these lists, the 2009 Report recommended incorporating more aggressive energy efficiency and greenhouse gas reductions into product specifications.

Update:

Currently, the Interagency Committee on Sustainability and Green Procurement is still in place under E.O. 4 and has continued to move forward with its State Green Procurement and Agency Sustainability Program. There was a progress report released for the 2008-2009 fiscal year addressing the successes and challenges found thus far in implementing E.O. 4.[118] The report, consisting of a compilation of agency reports, found that while generally the Interagency anticipates such green products to be competitively priced, some may be higher due to regional fluctuations or market demand (for example, recycled paper). Also, as the categories chosen by the Committee are typically those purchased in high volumes a bigger impact is made on the State's marketplace. The progress report also found that "while many agencies were engaged in green efforts before the signing of the Order, E.O. 4 has accelerated these efforts and enabled agencies to exchange ideas and learn from each other," and more specifically, 60 out of 69 agencies which submitted reports were found to have engaged in Green Procurement activities in 2008-2009.

21. Promote Methane Capture

The 2009 Report recommended requiring methane capture in all municipal solid waste (MSW) landfills and sewage treatment plants. The 2009 Report further recommends that New York follow the lead of other states that have found innovative ways to promote methane capture, or require consideration of methane capture technology as part of the initial MSW permitting decision.

Update:

New York State has existing regulatory and infrastructure in place to leverage the promotion of gas recovery at MSW landfills. 6 NYCRR Section 360-2.13(p) requires MSW landfills in New York to contain a

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116 *Id*.

117 David Paterson, *Executive Order 4* (April 2008),http://www.ogs.state.ny.us/EO/4/Default.asp.

118 First Annual Progress Report on State Green Procurement and Agency Sustainability Fiscal Year 2008-2009, http://www.ogs.state.ny.us/EO/4/Docs/FirstAnnualProgressReport.pdf.

gas venting layer that releases methane and other gases produced from the decomposition process.[119] New York is taking steps to increase methane capture through the formation of a partnership with EPA's Landfill Methane Outreach Program, through which EPA helps states overcome barriers to project development. Current incentives in New York include New York's CO_2 Budget Trading Program, which allows for CO_2 offset allowances for landfill methane capture and destruction.[120]

Other initiatives for methane capture in New York include NYSERDA projects and the initiatives of utilities, such as NYPA promoting methane capture at sewage treatment plants, as mentioned in the discussion of recommendation 8 in this Update.

Another development in methane capture is at dairy farms. In 2009, the Innovation Center for U.S. Dairy signed a Memorandum of Understanding with the U.S. Department of Agriculture (USDA) to reduce GHG emissions from US dairy farms by 25 % by 2020.[121] New York State was selected to host a "Dairy Power Project," promoting methane digester use as a means of producing electricity from methane gas stored in manure. This pilot project was coordinated by U.S. Dairy "to conduct a market assessment of identify and prioritize regions with the greatest opportunity for methane digester adoption."[122] There are currently 12 installed methane digesters in New York which produce about 1.3 megawatts of energy.[123] With over 6,200 dairy farms and over 600,000 dairy cows in the State, estimates indicate there is a potential for 7.6 megawatts of energy that could be produced from an additional 19 methane digesters waiting to be installed in New York.[124]

22. Improve New York's Floodplain Mapping System

Floodplain mapping is the process of mapping out which areas in a state or municipality are especially subject to flooding. While the Federal Emergency Management Agency (FEMA) has traditionally been responsible for conducting floodplain mapping, many FEMA maps are out of date. Recently, state and local governments (often with the approval of FEMA) have begun to conduct their own floodplain mapping. FEMA designs floodplain maps by looking at historical data. With sea levels rising, historical data are no longer the best predictor of what flooding will look like in the future.

The 2009 Report recommended that New York update its flood zone maps to correctly reflect which areas are at risk of flooding by looking at projections regarding future sea level rise. If maps were updated to correctly reflect flooding dangers, municipalities or the State could use those maps to shape

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119 6 NYCRR § 360-2.13(p).

120 *CO2 Emissions Offset Projects*, NYS DEC, http://www.dec.ny.gov/energy/53449.html (last visited Jan. 20, 2011).

121 *USDA & Innovation Center for U.S. Dairy Announce Agreement to Enhance Sustainability* INNOVATION CENTER FOR U.S. DAIRY (Dec. 15, 2009), *available at* http://www.usdairy.com/Newsroom/2009PressReleases/Pages/USDAInnovationCenterforUSDairyAnnounceAgreementtoEnhanceSustainability.aspx.

122 *New York Wants New Dairy Methane Digesters*, FARM AND DAIRY (Jul. 28, 2009), http://www.farmanddairy.com/news/ny-wants-new-dairy-methane-digesters/12681.html (last visited Jan. 19, 2011).

123 *Id*.; s*ee generally, AgStar Fact Sheets*, U.S. EPA http://www.epa.gov/agstar/anaerobic/fact.html (last visited Jan. 19, 2011).

124 *New York Wants New Dairy Methane Digesters*, FARM AND DAIRY (Jul. 28, 2009), http://www.farmanddairy.com/news/ny-wants-new-dairy-methane-digesters/12681.html (last visited Jan. 19, 2011).

appropriate land use rules and to regulate new construction in the most flood-prone areas. They could also revise building codes to require buildings in flood-prone areas become more flood-resilient, such as by requiring that lower levels of buildings in these areas remain unfinished and/or first floors be elevated. New York should ensure that all of its flood maps are updated using data and projections that take anticipated climate change into account.

Update:

The Sea Level Rise Task Force, a 2007 appointment of the Legislature, recently completed its final report on impacts and resiliency efforts along the State's coastlines. The deficiencies in FEMA maps (i.e., they are outdated, relying on studies from the 1980s, and underestimate the actual risks of flooding) are enduring, and the Sea Level Task Force recommends that DOS and DEC work together to develop more accurate floodplains maps, which reflect projected sea level rise and changes in coastal flooding through 2100. These maps should identify coastal risk management zones, indicate differential levels of risk, and be readily accessible to the public.[125]

Further, the Task Force's Report recognizes that the structure of current state/ and federal insurance programs distorts the costs and risks of coastal development, makes building in floodplains more attractive to developers, and perpetuates a cycle of continued building and destruction. (As a result, New York State has spent more than $22.5 million in the past five years on protecting public infrastructure, commercial, and residential properties from flooding in coastal areas.[126] The Task Force recommends instituting federal incentives for relocating existing development out of floodplains and disincentives for siting new structures in floodplains. The Task Force further recommends amending the New York State Property Disclosure Statement in the Real Property Law to include a disclosure of proposed development in hazard areas and floodplains.[127]

Additionally, the Sea Level Rise Task Force Report recommends several measures to increase coastal resiliency. Non-structural solutions (such as land acquisition, buffer zones, conservation of natural flood protection systems, elevation, building codes, and other local regulations) are recommended over structural solutions that fortify the shoreline on a large scale. With structural measures, the risks of inundation and flooding remain high, whereas with non-structural mechanisms, the natural environment has an opportunity to strengthen itself and protect the uplands.[128]

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[125] NEW YORK STATE SEA LEVEL RISE TASK FORCE, REPORT TO THE LEGISLATURE 59-60, 65 (2010), *available at* http://www.dec.ny.gov/docs/administration_pdf/slrtffinalrep.pdf.

[126] NEW YORK STATE SEA LEVEL RISE TASK FORCE, REPORT TO THE LEGISLATURE 41 (2010), *available at* http://www.dec.ny.gov/docs/administration_pdf/slrtffinalrep.pdf.

[127] NEW YORK STATE SEA LEVEL RISE TASK FORCE, REPORT TO THE LEGISLATURE 68, 80 (2010), *available at* http://www.dec.ny.gov/docs/administration_pdf/slrtffinalrep.pdf.

[128] NEW YORK STATE SEA LEVEL RISE TASK FORCE, REPORT TO THE LEGISLATURE 40, 41 (2010), *available at* http://www.dec.ny.gov/docs/administration_pdf/slrtffinalrep.pdf.