

# Legal Issues in Financing Energy Efficiency: Creative Solutions for Funding the Initial Capital Costs of Investments in Energy Efficiency Measures

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## I. Introduction

Policymakers at the federal level are currently considering proposals designed to achieve substantial reductions in greenhouse gas (“GHG”) emissions over the next four decades in response to urgent concerns about climate change. Both the American Clean Energy and Security Act of 2009 (“ACES”)<sup>1</sup> passed by the U.S. House of Representatives in June 2009 and the American Power Act<sup>2</sup>—introduced in the U.S. Senate by Senators John Kerry and Joseph Lieberman in May 2010—include provisions designed to achieve eighty-three percent reductions in GHG emissions in the United States below 2005 levels by 2050.<sup>3</sup> New York State, for its part, has adopted a goal of achieving an eighty percent reduction in GHG emissions below 1990 levels by 2050, in an executive order issued by Governor David Paterson in August 2009.<sup>4</sup> New York policymakers are currently involved in developing a Climate Action Plan to achieve this “80 by 50” objective.<sup>5</sup>

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1. American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (1st Sess. 2009).
2. American Power Act of 2010, S. 1733, 111th Cong. (2d Sess. 2009).
3. H.R. 2454 § 702(4); S. 1733 § 3(4).
4. Establishing a Goal to Reduce Greenhouse Gas Emissions Eighty Percent by the Year 2050 and Preparing a Climate Action Plan, N.Y. Exec. Order No. 24 § 1 (Aug. 6, 2009).
5. Executive Order 24 also created the New York Climate Action Council (“CAC”) with a directive to prepare a draft Climate Action Plan by September 30, 2010. *Id.* §§ 2–3. The Climate Action Plan will assess how all economic sectors can reduce GHG emissions and adapt to climate change. *See id.* § 4;

The most cost-effective means of achieving the necessary GHG emission reductions to meet climate change objectives is through investing in energy efficiency measures.<sup>6</sup> According to the GHG cost abatement curve analysis prepared by McKinsey and Company (“McKinsey”), for example, improving energy efficiency in buildings and appliances could achieve reductions of between 710 and 870 megatons of GHG emissions by 2030 at a *negative cost* over the useful life of the improvement.<sup>7</sup> In other words, investing in various energy efficiency measures<sup>8</sup> would generate *positive economic returns* over their lifecycles. Another McKinsey study indicates that by 2020, the United States could reduce annual energy consumption by twenty-three percent below a business-as-usual projection through an array of negative cost energy efficiency measures.<sup>9</sup> In addition to achieving GHG reductions, investing in energy efficiency serves other important objectives, such as promoting energy security by reducing the need to import energy from foreign sources and addressing energy affordability by helping utility consumers reduce their energy bills through reduced consumption of electricity and natural gas.<sup>10</sup>

The residential sector accounts for about thirty-five percent of the energy efficiency potential identified by the *McK-*

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N.Y. ST. CLIMATE ACTION COUNCIL, <http://nyclimatechange.us/> (last visited Oct. 7, 2010).

6. JON CREYS ET AL., MCKINSEY & CO., REDUCING U.S. GREENHOUSE GAS EMISSIONS: HOW MUCH AT WHAT COST? at ix, xiv (2007), <http://gei.newscorp.com/resources/files/mckinsey--howmuchatwhatcost.pdf> [hereinafter MCKINSEY GHG STUDY].
7. *Id.* at xiv.
8. The MCKINSEY GHG STUDY identified the following energy efficiency measures, among other options: “lighting retrofits; improved heating, ventilation, air conditioning systems, building envelopes[,] and building control systems; [and] higher performance for consumer and office electronics and appliances.” *Id.*
9. HANNAH CHOI GRANADE ET AL., MCKINSEY & CO., UNLOCKING ENERGY EFFICIENCY IN THE U.S. ECONOMY: EXECUTIVE SUMMARY 2 (2009), [http://www.mckinsey.com/client-service/electricpowernaturalgas/downloads/US\\_energy\\_efficiency\\_exc\\_summary.pdf](http://www.mckinsey.com/client-service/electricpowernaturalgas/downloads/US_energy_efficiency_exc_summary.pdf) [hereinafter MCKINSEY EE STUDY].
10. *Id.* at 1.

*insey EE Study*.<sup>11</sup> Capturing this potential, however, remains challenging. As stated in the *McKinsey EE Study*, given the “highly compelling nature” of energy efficiency, the question is “why the economy has not already captured this potential, since it is so large and attractive.”<sup>12</sup>

A significant barrier to capturing this potential is the initial capital costs of investments in energy efficiency measures, which “[b]y their nature . . . typically require a substantial upfront investment in exchange for savings that accrue over the lifetime of the deployed measures.”<sup>13</sup> Securing a source of funds for the initial capital costs of investing in energy efficiency measures is a significant barrier to scaling up the level of energy savings that will be necessary to reduce reliance on fossil fuels and to decrease GHG emissions.<sup>14</sup> An additional challenge arises from the frequent mismatch between energy efficiency measures with a long useful life—such as heating, ventilation, and air conditioning (“HVAC”) improvements—and the expected duration of the current occupancy of the residential or commercial unit. Property owners will likely be disinclined to invest in energy efficiency measures that may not produce a return on the investment for several years if there is any likelihood that the property owner will sell or vacate the property prior to the end of the payback period<sup>15</sup> for a particular measure.

This Article will discuss possible solutions designed to address the issues of (1) financing the initial capital costs of investing in energy efficiency measures, and (2) providing a means of spreading the repayment obligation over the useful lives of the installed measures in a manner that recovers the costs from the occupant receiving the benefits from the measure. It will focus on two approaches in particular that are currently being considered or implemented in New York State. The first, Property Assessed Clean Energy (“PACE”) financing, authorizes the issuance of bonds to provide a potential source of up-front financing for property owners to make energy efficiency (and renewable energy) improvements. PACE financing programs include a repayment mechanism—surcharges on property tax bills—that allows the repayment obligation for these improvements to “run” with the property and to transfer automatically to the next property owner if the property is sold. The second approach is “on-bill recovery,” which contemplates the up-front capital being provided by the serving electric or gas utility or a third-party lender, with a repayment mechanism—surcharges on utility bills—that allows the repayment obligation for these improvements to “run” with the utility meter and to transfer automatically to the subsequent occupant of the property. This Article will examine the features of these particular approaches, as well as the legal challenges and issues associated with their implementation and administration in New York. It will also review the financial benefits associated with

these particular forms of energy efficiency financing, including their ability to make capital available to borrowers that may not otherwise be able to access capital, and on more reasonable terms than would otherwise be available.

## II. PACE Financing

### A. Overview of the Elements of PACE Financing

During the 2009 legislative session, New York State adopted enabling legislation authorizing the implementation of PACE financing for energy efficiency and renewable energy measures.<sup>16</sup> This program, modeled after similar programs recently developed in other states and municipalities, provides a mechanism whereby property owners can repay loans for financing clean energy measures through an annual assessment on their property tax bills.<sup>17</sup> The program is described in the White House *Policy Framework for PACE Financing Programs* (“*White House Policy Framework*”) as a logical extension of the use of land-secured financing districts (or special tax or special assessment districts) commonly used as a tool in municipal finance.<sup>18</sup> As described in the *White House Policy Framework*:

In a typical assessment district a local government issues bonds to fund projects with a public purpose such as streetlights, sewer systems or underground utility lines. Property owners that benefit from the improvement then repay the bond through property assessments, secured by a property lien and paid as part of the property taxes.

If appropriately designed and implemented, extension of this finance model to energy improvements may allow property owners to pay for efficient enhancements with expected monthly payments that are less than expected utility bill savings.<sup>19</sup>

The essential elements of the PACE model are as follows:

1. Municipalities provide financing for “clean energy” measures, which include both energy efficiency improvements and renewable energy systems.<sup>20</sup> Funding is provided by either federal grant assistance or municipal bonds backed by a federal loan guarantee.<sup>21</sup>
2. The funding agency is granted a senior tax lien on the real property benefited by the loan.<sup>22</sup>
3. Loans are repaid over a relatively long period of time that corresponds to the useful life of the measures installed (typically up to twenty years) through a sep-

16. N.Y. GEN. MUN. L. §§ 119-ee to -gg (McKinney 2010).

17. WHITE HOUSE, POLICY FRAMEWORK FOR PACE FINANCING PROGRAMS 2 (2009), [http://www.whitehouse.gov/assets/documents/PACE\\_Principles.pdf](http://www.whitehouse.gov/assets/documents/PACE_Principles.pdf) [hereinafter WHITE HOUSE POLICY FRAMEWORK].

18. *Id.*

19. *Id.* at 2.

20. See *PACE Finance Summary Sheet*, PACE NOW, <http://pacenow.org/documents/PACE%20Summary%20Description%20for%20Legislators.pdf> (last visited June 27, 2010) [hereinafter *PACE Finance Summary*].

21. See WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 2–3.

22. See *PACE Finance Summary*, *supra* note 20.

11. *Id.* at 2.

12. *Id.* at 6.

13. *Id.*

14. See *id.* at 7.

15. The “payback period” refers to the period over which an energy efficiency measure recovers, or “repays,” the costs of the initial investment through energy savings.

arately identified charge on the property owner's tax bill.<sup>23</sup> Because the obligation "runs" with the property, owners can finance measures with payback periods that last beyond their particular ownership.<sup>24</sup>

4. As a result of the longer repayment period and property tax surcharge, property owners stand to benefit significantly from additional cash flow early in the program, enabling them to undertake significant energy retrofits in their homes and businesses.<sup>25</sup> Once the retrofits are completed, savings are realized immediately through utility bills, which are expected to be up to thirty percent lower for most retrofit projects.<sup>26</sup>

This section of the Article describes the development of the PACE model nationally, as well as New York's previous experience with a similar program. The Article then discusses the features of the PACE program adopted in New York, and describes the benefits of the program for property owners and municipalities.

## B. Development of the PACE Model

### I. The Berkeley FIRST Program

The PACE program was designed to address the most common issues in financing energy efficiency retrofits, such as "short repayment periods, high interest rates, credit requirements that do not account for energy savings, a lack of options for recent homebuyers, and limited availability for households most in need."<sup>27</sup> In response to strong public demand for a more cost-effective program that would allow for participation by more homeowners, the first PACE program, entitled Berkeley FIRST, was implemented in Berkeley, California in 2008.<sup>28</sup> Berkeley FIRST allows Berkeley to provide funding through PACE-type bonds issued to resi-

dential and commercial property owners to undertake the installation of photovoltaic panels.<sup>29</sup> Berkeley's model uses the authority typically used by municipalities to fund public improvements through financing, or assessment, districts.<sup>30</sup> In this case, this authority was extended to apply to a new form of improvement—solar photovoltaic ("PV") panels.<sup>31</sup> The property owners benefiting from the improvement repay the city on their property tax bill through a small surcharge.<sup>32</sup>

The property tax surcharge is equal to the cost of the project installed, plus interest and administration fees, and is spread over many years (typically fifteen to twenty) to reduce annual payments.<sup>33</sup> For example, according to Renewable Funding LLC, a project costing \$12,000 for a particular property would translate into a property tax assessment of approximately \$900 per year, or \$75 per month, excluding any tax deductions.<sup>34</sup> To address the concern that utility bill savings will be equal to or, ideally, greater than the cost of the improvements, an energy audit is completed on each piece of property prior to the owner receiving funding to install the improvements.<sup>35</sup> To ensure that utility bill savings outweigh the property tax surcharge, property owners are strongly encouraged to adequately research the types of improvements they intend to install and the contractors that they hire to perform them.<sup>36</sup>

Though financing mechanisms can be set up in different ways, the Berkeley FIRST program provides a useful example of a successful financing structure. Berkeley creates a pool of funds with federal stimulus, or American Recovery and Reinvestment Act ("ARRA"),<sup>37</sup> funds, which are then held by a financing partner, typically either an assessment district or a finance company.<sup>38</sup> Property owners are issued a check for the amount requested, up to \$37,500.<sup>39</sup> The amount of the loan covers the cost of the energy efficiency or renewable energy system, installation, interest payments, and city

23. See *id.*

24. See WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 2.

25. See PACE Finance Summary, *supra* note 20.

26. See Press Release, U.S. Dep't of Energy, Vice President Biden Unveils Report Focused on Expanding Green Jobs and Energy Savings for Middle Class Families (Oct. 19, 2009) (on file with author). As an example, the Director of Energy Resources of Bedford, New York presented calculations showing the cost of an average retrofit to achieve thirty percent energy savings (\$12,000) which, if financed through PACE bonds over twenty years at seven percent interest, would require annual property tax assessments of \$1,132. MARK F. THIELKING, PACE FINANCING—SCALING UP ENERGY EFFICIENCY IN OUR ECONOMY: TOWN OF BEDFORD PILOT/NORTHERN WESTCHESTER ENERGY ACTION CONSORTIUM RETROFIT PROGRAM—A CASE STUDY 10 (2010). Based on typical energy usage within the town of Bedford, a thirty percent reduction in electricity and natural gas bills would produce savings of \$1,575, thereby producing a positive cash flow of \$443 for the property owned in the first year. *Id.* at 10. The *White House Policy Framework* provides that, as a matter of "homeowner protection," the "savings to investment ratio" be greater than one. WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 4. In other words, the expected average monthly utility savings to the property owner should be greater than the expected monthly increase in tax assessments resulting from PACE financing. *Id.* at 4–5.

27. Press Release, David A. Paterson, Governor, N.Y. State, Governor Paterson, Congressman Israel and Legislative Leaders Announce Passage of Municipal Clean Energy Loan Legislation (Nov. 16, 2009) (on file with author), available at [http://www.state.ny.us/governor/press/press\\_1116091.html](http://www.state.ny.us/governor/press/press_1116091.html).

28. See *Berkeley FIRST Financing Initiative for Renewable and Solar Technology*, OFFICE OF ENERGY & SUSTAINABLE DEV., CITY OF BERKELEY, <http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=26580> (last visited Oct. 7, 2010);

*Berkeley Moves Ahead with Solar-Financing Program*, WSVN.COM, Sept. 8, 2008, <http://www.wsvn.com/news/articles/national/MI97871/>.

29. *Berkeley Moves Ahead with Solar-Financing Program*, *supra* note 28.

30. Berkeley relied on the authority granted in the Mello-Roos Community Facilities Act of 1982, CAL. GOV'T CODE §§ 53311–53368.3 (West 1997), which provides a method for local governments to finance needed improvements and services.

31. *Berkeley FIRST Financing Initiative for Renewable and Solar Technology*, *supra* note 28.

32. See *Property-Assessed Clean Energy (PACE) Programs*, U.S. DEP'T OF ENERGY, <http://www.eecbg.energy.gov/solutioncenter/financialproducts/PACE.html> (last visited Oct. 7, 2010) [hereinafter *DOE PACE Overview*].

33. See *Frequently Asked Questions, RENEWABLE FUNDING LLC*, <http://www.renewfund.com/pace/faqs> (last visited Sept. 12, 2010).

34. See *id.*

35. See *id.*

36. The Berkeley FIRST website includes a payment calculator that can help potential participants determine their anticipated savings and monthly payments before applying for the program. See *Program Details*, BERKELEY FIRST, <http://www.berkeleyfirst.renewfund.com/learn-more/program-details> (last visited Sept. 24, 2010).

37. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (codified as amended in scattered sections of 19, 26 and 42 U.S.C.A.).

38. See *Frequently Asked Questions*, OFFICE OF ENERGY & SUSTAINABLE DEV., CITY OF BERKELEY, <http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=27076> (last visited Aug. 1, 2010).

39. See *Frequently Asked Questions*, BERKELEY FIRST, <http://www.berkeleyfirst.renewfund.com/learn-more/faqs> (last visited Sept. 24, 2010).

administrative costs.<sup>40</sup> Berkeley is repaid through a bi-annual property tax surcharge paid by participating property owners.<sup>41</sup> These funds are then used to continue funding for PV panel installations on other properties.<sup>42</sup> The Berkeley FIRST program has generally been viewed as a successful pilot program; ultimately thirteen solar PV projects were funded at a net cost of approximately \$325,000.<sup>43</sup>

## 2. Federal and State Efforts to Promote PACE Financing

The PACE approach, also referred to as the Municipal Sustainable Energy Loan Program, gained national momentum in October 2009 with Vice President Joseph Biden's "Recovery through Retrofit" plan, under which \$454 million in ARRA funding was allotted to finance pilot energy efficiency and renewable energy programs nationwide.<sup>44</sup> However, two problems quickly became apparent and required additional action by the states. First, a state's opportunity to receive federal funding, which was apportioned on a competitive basis, was enhanced by having a statewide program in place through which to distribute funds.<sup>45</sup> The establishment of a PACE program would do just that, in effect creating a revolving loan fund which would be continually replenished through a property tax surcharge. It would have the additional benefit of allowing the stimulus dollars to be stretched further and increasing the program's reach.<sup>46</sup> Second, for certain states, including New York, participation in PACE loan programs via an additional property tax charge would amount to a violation of state law because of limitations on what can and cannot be included in property taxes.<sup>47</sup> As a result, states began to pass enabling legislation, thereby resolving any doubt about the legality of municipalities' participation in these types of programs.<sup>48</sup>

While two states, Utah and Florida, had previously existing legislation allowing property owners to participate in a PACE-type of program, sixteen states (other than New York) and the District of Columbia have passed enabling legislation, as of March 2010, allowing municipalities to opt in to these programs.<sup>49</sup> PACENow.org, a national organization

supporting PACE legislation has estimated that, if adopted nationally, PACE bonds could finance greater than \$500 billion for up-front costs and still not capture its full potential for increasing energy efficiency.<sup>50</sup>

### C. The Babylon Project

While New York's PACE legislation gives municipalities the ability to provide loans to property owners, it is not the first program of its kind in the state. In October 2008, the town of Babylon launched an innovative program called "The Babylon Project" to provide financing for residential property owners to undertake energy efficiency and renewable energy improvements.<sup>51</sup> The Babylon Project differs from the PACE model in that it is not funded through a property tax surcharge but rather through the town's solid waste district.<sup>52</sup> Pursuant to New York State law, the town is required to maintain a solid waste reserve fund that is occasionally used to cap a town waste facility.<sup>53</sup> In order to fund a pilot program for energy efficiency improvements, Babylon amended the definition of solid waste to include the "carbon component" in energy waste.<sup>54</sup> Pursuant to the town law which authorizes The Babylon Project, an "energy efficiency improvement" was redefined as "a material improvement made to an existing residential property that reduces energy consumption, including but not limited to caulking, weatherstripping, air sealing, insulation, heating and cooling systems upgrades, solar thermal systems and conservation measures, in a cost-effective manner as determined by the town . . . ."<sup>55</sup> As a result, anything leading to the reduction of carbon, including the installation of energy efficiency and renewable energy measures, can be funded through Babylon's solid waste district.

Following an energy assessment, which costs approximately \$250, homeowners are eligible to receive up to \$12,000 worth of energy improvements for each home.<sup>56</sup> In addition to the \$250 assessment fee, a one-time administrative fee of three percent is added to the total cost of the retrofit.<sup>57</sup> As of late November 2009, Babylon had completed 304 energy audits, 155 retrofits, and it had an additional 120

40. See *id.*

41. See *id.*

42. See *id.*

43. PACE NOW ET AL., PROPERTY ASSESSED CLEAN ENERGY (PACE) PROGRAMS WHITE PAPER: HELPING ACHIEVE ENVIRONMENTAL SUSTAINABILITY AND ENERGY INDEPENDENCE, IMPROVING HOMEOWNER CASH FLOW AND CREDIT PROFILE, PROTECTING MORTGAGE LENDERS, AND CREATING JOBS 7 (2010) [hereinafter PACE WHITE PAPER].

44. See Press Release, U.S. Dep't of Energy, *supra* note 26.

45. Telephone Interview with Jackson Morris, Senior Policy Advisor, Pace Energy and Climate Center (Jan. 22, 2010).

46. *Id.*

47. Prior to the enactment of the PACE legislation, the General Municipal Law did not authorize municipalities to create programs which authorize repayment of funds through a property tax surcharge. See Municipal Sustainable Energy Loan Program, 2009 N.Y. Sess. Laws 1292 (McKinney) (amending the New York General Municipal Law by adding section 119-gg to authorize municipalities to create such programs).

48. See Telephone Interview with Jackson Morris, *supra* note 45.

49. PACE WHITE PAPER, *supra* note 43, at 8. The sixteen states are California, Colorado, Illinois, Louisiana, Maine, Maryland, Minnesota, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Texas, Vermont, Virginia,

and Wisconsin. *Id.*; *Financing Program Support for ARRA Recipients: Introductory Webinar*, U.S. DEP'T OF ENERGY, at 14 (Nov. 12, 2009), [http://www.eecbg.energy.gov/Downloads/EECBG\\_Finance\\_Webcast\\_111209.pdf](http://www.eecbg.energy.gov/Downloads/EECBG_Finance_Webcast_111209.pdf). In addition, another fourteen states are considering PACE legislation: Alaska, Arizona, Florida, Georgia, Hawaii, Iowa, Kansas, Massachusetts, Michigan, Missouri, Nebraska, New Hampshire, New Jersey, and South Carolina. *Id.*

50. See PACE WHITE PAPER, *supra* note 43, at 14.

51. *What is the Babylon Project?*, THE BABYLON PROJECT, <http://www.thebabylonproject.org/main-information/> (last visited Feb. 28, 2010).

52. *Id.*

53. *Id.*

54. BABYLON, N.Y., CODE ch. 133, art. 1 (2009); See also *What is the Babylon Project?*, *supra* note 51.

55. N.Y. TOWN LAW § 209-1 (McKinney 2010); see also *Carbon in Waste Declared Solid Waste*, THE BABYLON PROJECT (June 22, 2009, 2:14 PM), <http://www.thebabylonproject.org/blog/2009/6/22/carbon-in-waste-declared-solid-waste.html>.

56. See Carolyn Nardiello, *In Babylon, an Incentive for Energy Efficiency*, N.Y. TIMES, Jan. 18, 2009, at L15. If the homeowners decide to participate in the program, this \$250 energy assessment cost is added to the overall cost of the retrofit and repaid over several years through their solid waste district. See *id.*

57. *Id.*

projects (audits and retrofits combined) in progress.<sup>58</sup> The average retrofit cost was approximately \$8,000, while average annual savings for each job were over \$1,000, meaning that the full cost of the average retrofit is repaid in approximately eight years.<sup>59</sup> Through the installation of sealants, insulation, and improved HVAC systems, Babylon residents have saved over 700 tons of carbon dioxide from being emitted annually, mainly through savings in oil use, natural gas, propane, and electricity.<sup>60</sup>

To address concerns about its actions being consistent with state law, and to allow other municipalities to pursue energy savings in the same manner, Babylon advocated for legislative authority at the state level.<sup>61</sup> In August 2009, the New York State legislature amended a section of the Town Law to authorize the “prevention or reduction of waste matter consisting of carbon components of energy waste from residential properties.”<sup>62</sup> As a result, municipalities in New York State now have the option of pursuing energy efficiency improvements either through financing with PACE bonds, or through their local solid waste district.

In June 2009, two more PACE programs were started with enabling legislation allowing the city of Binghamton and the town of Bedford to start their own pilot programs. Both used the annual property tax surcharge, rather than the Babylon model of financing through solid waste districts.<sup>63</sup>

#### D. Elements of the PACE Program in New York

On November 19, 2009, Governor David Paterson signed into law PACE enabling legislation in New York State.<sup>64</sup> The law allows municipalities to provide both residential and commercial property owners that choose to participate in the program with ARRA funds.<sup>65</sup> This funding takes the form of a loan which can pay for up to 100% of the cost of energy efficiency improvements and renewable energy improvements in the participants’ homes or businesses.<sup>66</sup> The law amends the General Municipal Law to add a new Article 5-L

entitled “Municipal Sustainable Energy Loan Program.”<sup>67</sup> Among other things, Article 5-L (1) defines the measures that are eligible to be financed with PACE bonds, (2) specifies the period of time over which the loans are to be repaid, (3) describes how the loans are to be repaid, and (4) sets limitations on the principal amount of each loan.<sup>68</sup>

#### 1. Eligible Measures

Clean energy measures that are eligible to be financed with PACE bonds include “energy efficiency improvements” and “renewable energy systems.”<sup>69</sup> “Energy efficiency improvements” include “any renovation or retrofitting of a building to reduce energy consumption, such as window and door replacement, lighting, caulking, weatherstripping, air sealing, insulation, and heating and cooling system upgrades . . . .”<sup>70</sup> The improvement must be shown to be cost-effective through an energy audit<sup>71</sup> and in accordance with criteria established by the lending authority.<sup>72</sup> “Renewable energy systems” are facilities that generate electric or thermal energy, and that have been determined to be feasible through a feasibility study.<sup>73</sup> These include “solar thermal, solar photovoltaic, wind, geothermal, anaerobic digester gas-to-electricity systems, fuel cell technologies, [and] other renewable energy technology approved by the lending authority.”<sup>74</sup> The use of proceeds from PACE bonds is not limited to the financing of only the clean energy measures themselves; loans may also cover the cost of energy audits for energy efficiency measures and feasibility studies for renewable energy systems, as well as costs associated with the verification of the installation of the measures.<sup>75</sup>

#### 2. Security for the Loan

The loan “constitute[s] a lien upon the real property benefited by the loan.”<sup>76</sup> Because the loan is secured by property taxes that run with the real property, PACE financing is not “due on sale,” which helps owners seeking to install measures that may extend beyond the term of their particular ownership.<sup>77</sup> Participating property owners assume no personal debt because the lien is placed on the property rather than on the individual. When the property owner wishes to sell, the lien is transferred to the new property owner.<sup>78</sup> Moreover,

58. *Introduction to Property Assessed Clean Energy (PACE) Financing Programs: PACE Webinar*, U.S. DEP’T OF ENERGY, 32 (Nov. 18, 2009), [http://www1.eere.energy.gov/wip/solutioncenter/pdfs/EECBG\\_PACE\\_Webinar\\_111709.pdf](http://www1.eere.energy.gov/wip/solutioncenter/pdfs/EECBG_PACE_Webinar_111709.pdf) (due to title discrepancies, source cited according to its listed title in DOE’s

Webcast index, available at <http://www1.eere.energy.gov/wip/solutioncenter/webcasts/default.html>) [hereinafter *DOE PACE Webinar*].

59. *Id.*; see also Nardiello, *supra* note 56.

60. *DOE PACE Webinar*, *supra* note 58, at 34.

61. See Editorial, *Babylon Has the Right Idea for Greener Homes*, NEWSDAY, May 17, 2009, available at [http://babylonproject.squarespace.com/storage/press/5-17-09\\_Newsday.pdf](http://babylonproject.squarespace.com/storage/press/5-17-09_Newsday.pdf).

62. N.Y. TOWN LAW § 209-I (McKinney 2010).

63. Press Release, David A. Paterson, *supra* note 27.

64. N.Y. GEN. MUN. LAW §§ 119-ee to -gg (McKinney 2010).

65. See *id.* §§ 119-ff to -gg.

66. See *id.* § 119-gg. The New York statute enacted in November 2009 limits available PACE funding sources in New York to federal grants or federal grant support. *Id.* Legislation is currently being proposed in the New York State Legislature to amend the existing PACE enabling statute to expand permissible funding sources beyond federal assistance or credit support. S. 7683, 233d Sess. (N.Y. 2010). As an additional measure to expand the use of PACE financing, the proposed legislation would authorize the New York State Energy Research and Development Authority (“NYSERDA”) to develop an optional statewide aggregating model for PACE programs. See *id.* In recognition that only a small number of municipalities may possess the expertise and access to capital needed to create their own PACE bond issuance mechanisms, the

proposed statewide aggregating mechanism would lower the cost of capital and transaction costs for smaller municipalities throughout New York. See *id.*

67. GEN. MUN. §§ 119-ee to -gg.

68. See *id.* §§ 119-ff to -gg.

69. *Id.* § 119-gg(2).

70. *Id.* § 119-ff(4).

71. *Id.* § 119-gg(7).

72. *Id.* § 119-gg(3).

73. *Id.* § 119-ff(6)–(7).

74. *Id.* § 119-ff(6).

75. *Id.* § 119-gg(2).

76. *Id.* § 119-gg(8).

77. See PACE WHITE PAPER, *supra* note 43, at 12–13.

78. See Congressman Steve Israel, *Roll Call: PACE Bonds Promote Efficiency*, ISRAEL.HOUSE.GOV (Oct. 18, 2009, 7:00 PM), [http://israel.house.gov/index.php?option=com\\_content&task=view&id=546&Itemid=116](http://israel.house.gov/index.php?option=com_content&task=view&id=546&Itemid=116). In contrast, if the energy improvement measures were financed using a home equity line of credit—the most commonly considered consumer alternative to PACE financ-

property owners will reap a tax benefit to the extent that the property taxes are deductible, thereby lowering the overall amount of taxable income and the amount of tax paid.<sup>79</sup>

### 3. Limitation on Principal Amount

The principal amount of each PACE loan cannot exceed ten percent of the appraised real property value.<sup>80</sup> This limitation was deemed to be necessary to protect mortgage holders, given the senior tax lien position afforded to the loan under the PACE program.<sup>81</sup>

### 4. Other Non-Statutory Provisions

The *White House Policy Framework* included additional recommended measures designed to limit risk to mortgage lenders that were not included in the New York statute. One such measure is the establishment of an “Assessment Reserve Fund,” to be created at the local government level as a protection for the third-party lender against late payment or non-payment of the assessment.<sup>82</sup> Another such measure is requiring participating property owners to be current on their property taxes, have no outstanding tax liens on the property, have no notices of default or delinquency for the preceding three years, and be current on all mortgage debt.<sup>83</sup> The *White House Policy Framework* also recommends against issuing PACE loans to borrowers who are “underwater,” i.e., those whose mortgage and other debt on the property are greater than the current value of the property.<sup>84</sup> These risk-reducing standards, if implemented by the local issuer of PACE financing, should result in lower interest rates for PACE bonds.<sup>85</sup>

### E. Legal Issues Associated with the PACE Model

The PACE model raises some interesting legal issues, given the proposed use of legislation to grant PACE-related assessments a lien position that is superior to prior mortgages or deeds of trust on the assessed property. Apart from the analysis of the technical legal issues associated with the PACE model, the Federal Housing Finance Agency (“FHFA”) has taken action that has virtually halted implementation of PACE programs throughout the nation. This action, in turn, has stimulated legal challenges, as well as the possibility of

a legislative solution on Capitol Hill. This Section will discuss the legal issues underlying the PACE model, followed by a review of the FHFA actions and the associated legal challenges.

### I. Legal Analysis of the PACE Model

The Contracts Clause of the U.S. Constitution prohibits states from “. . . pass[ing] any . . . Law impairing the Obligation of Contracts . . . .”<sup>86</sup> However, this prohibition on “impairment” of existing contracts is not absolute; rather, the prohibition of the Contract Clause must accommodate the inherent police power of the State “to safeguard the vital interests of its people.”<sup>87</sup> The leading case establishing the parameters for state action impairing contractual relationships is *Energy Reserves Group, Inc. v. Kansas Power and Light Co. (Energy Reserves Group)*.<sup>88</sup> According to the United States Supreme Court’s opinion in that case, “[t]he threshold inquiry is ‘whether the state law has, in fact, operated as a substantial impairment of a contractual relationship.’”<sup>89</sup> If the state action constitutes a substantial impairment, then “the State, in justification, must have a significant and legitimate public purpose behind the regulation, such as the remedying of a broad and general social or economic problem.”<sup>90</sup> According to the Court, “[this] requirement of a legitimate public purpose guarantees that the State is exercising its police power, rather than providing a benefit to special interests.”<sup>91</sup> Once this legitimate public purpose has been identified, then a court must consider whether the adjustment of “the rights and responsibilities of contracting parties [is based] upon reasonable conditions and [is] of a character appropriate to the public purpose justifying [the legislation’s] adoption.”<sup>92</sup>

The PACE legislation likely satisfies the three-pronged test set forth in *Energy Reserves Group*. First, as to the issue of whether the impairment is “substantial,” several features built into the design of the PACE model minimize the impairment of the contractual relationship between a mortgage holder and the property owner. The New York statute, for example, limits the amount of the lien to no greater than ten percent of the value of the property,<sup>93</sup> and the mortgage holder retains its rights to foreclose upon the property in the event of default and to protect its security interest in the property by paying any amount in default under the assessment.<sup>94</sup> Second, irrespective of whether the impairment is “substantial,” New York has articulated a significant and legitimate public interest in enacting the PACE legislation. According to the “legislative findings and declaration,” the State’s interest is “to achieve statewide energy efficiency and renewable energy goals, reduce greenhouse gas emissions and mitigate

ing—the outstanding balance would be “due on sale,” as in the case of all mortgages. PACE WHITE PAPER, *supra* note 43, at 13. “Homeowners selling their homes [would] have to pay off their [home equity loans]” at the time of closing, “before they realize the full, long-term economic benefits of the retrofit.” *Id.* Only homeowners who are certain that they won’t move over the term of the home equity loan— usually 10 or 15 years—would consider a retrofit, thereby excluding a significant part of the market. *Id.* PACE is designed to overcome this barrier by allowing the payment obligation to remain with the property, not with the individual homeowner. *See id.*

79. *See* Israel, *supra* note 78.

80. GEN. MUN. § 119-gg(6).

81. WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 6–7.

82. *Id.* at 7.

83. *Id.*

84. *Id.*

85. *See infra* Part II.F.

86. U.S. CONST., art. I, § 10, cl. 1.

87. *See* Home Bldg. & Loan Ass’n v. Blaisdell, 290 U.S. 398, 434 (1934).

88. *Energy Reserves Grp., Inc. v. Kan. Power & Light Co.*, 459 U.S. 400 (1983).

89. *Id.* at 411 (citation omitted).

90. *Id.* at 411–12 (citation omitted).

91. *Id.* at 412.

92. *Id.* (alteration in original) (quotation omitted).

93. N.Y. GEN. MUN. LAW § 119-gg(6) (McKinney 2010).

94. *See id.* § 119-gg (failing to include any language that would alter mortgage holders’ right to foreclose on the mortgaged property).

the effect of global climate change, and advance a clean energy economy.”<sup>95</sup> To achieve these objectives, the legislation declares that the State “must promote the deployment of renewable energy systems and energy efficiency measures” by enabling municipal corporations to achieve the “important public purpose” of “providing loans to property owners for the installation of renewable energy systems and energy efficiency measures.”<sup>96</sup> Third, adjustment of the rights and remedies of the contracting parties is fairly insignificant. The PACE program is narrowly focused on cost-effective clean energy improvements installed on the premises.<sup>97</sup> Given the economic value added by the PACE-funded energy efficiency measures, PACE financing likely does not materially change the loan-to-value ratio of the property.<sup>98</sup>

Apart from the constitutional issues under the Contract Clause, another potential legal issue is the authority of municipalities to create “land-secured” financing districts. As noted above, the *White House Policy Framework* suggests that the PACE financing model is a logical extension of the existing state laws that authorize the creation of “land-secured” financing districts to pay for public infrastructure improvements—such as streets, sidewalks, traffic signals, highway interchanges, and public parking—and other projects that serve a public purpose.<sup>99</sup> Under this practice, owners of the properties that benefit from the bond-funded infrastructure agree to a lien on their homes (or commercial property) that is paid off over time through an annual special tax or assessment.<sup>100</sup> The special tax or assessment revenue is used to pay debt service on the bonds, which are secured further by using the underlying taxed or assessed property as collateral.<sup>101</sup> The special tax or assessment constitutes a senior lien on the property and is superior to private liens such as construction or mortgage loans.<sup>102</sup> Unlike mortgage debt, however, the tax or assessment lien is not subject to acceleration.<sup>103</sup> The authorization for these “land-secured” districts is a function of state law, and the existing statutory authority must, in certain cases, be expanded to accommodate the elements of the PACE program. In New York, for example, the PACE legislation amended the sections of the General Municipal Law pertaining to the powers, limitations and liabilities of municipal corporations.<sup>104</sup>

Finally, a potential legal issue relates to the applicability of consumer credit laws, which typically apply to consumer loans for personal, family, or household purposes. These laws

do not apply to loans made under PACE programs, because “PACE programs involve a tax assessment on property that is improved with funds provided by the governmental body.”<sup>105</sup> A number of rulings confirm the distinction between a tax assessment against real property and the debtor-creditor relationship associated with a consumer loan. For example, the Board of Governors of the Federal Reserve System ruled that the Truth in Lending Act (“TILA”)<sup>106</sup> did not extend to tax liens and tax assessments because these are not “credit” transactions.<sup>107</sup> The U.S. Court of Appeals for the Third Circuit, in *Pollice v. National Tax Funding, L.P.*,<sup>108</sup> reached a similar conclusion with respect to the non-applicability of TILA and further determined that tax assessments are not consumer “debts” covered by the Fair Debt Collection Practices Act (“FDCPA”).<sup>109</sup>

## 2. FHFA Actions and Subsequent Developments

FHFA is a federal government agency created on July 30, 2008 to oversee the Federal National Mortgage Association (commonly known as “Fannie Mae”), the Federal Home Loan Mortgage Corporation (commonly known as “Freddie Mac”), and the Federal Home Loan Banks.<sup>110</sup> On June 18, 2009, James B. Lockhart III, then Director of FHFA, released a letter expressing concern about the negative impact of PACE programs on both the housing finance system and homeowner program participants.<sup>111</sup> Lockhart expressed concern that the superior lien status of PACE assessments to existing first mortgages could impair the value of the first mortgage to creditors and subsequent holders, and could also create risks for homeowners.<sup>112</sup> Over the following months, a number of PACE proponents responded to the concerns expressed in the FHFA letter.<sup>113</sup> The White House, in response to concerns that the FHFA was planning to follow its June 2009 letter with formal “guidance” to other agencies—possibly including Fannie Mae and Freddie Mac—that would discourage buying loans on properties subject to PACE-type assessment liens, issued its *White House Policy Framework* in October 2009, in an effort to head off issuance of the FHFA guidance.<sup>114</sup>

That strategy proved to be unsuccessful. On May 5, 2010, Fannie Mae and Freddie Mac each issued a letter directed to the home mortgage industry. Fannie Mae’s Lender Letter characterized the PACE assessments as “loans,” and advised

95. *Id.* § 119-ee.

96. *Id.* New York State Senate bill S. 7683 (titled “Municipal Sustainable Energy Financing Program”) would amend this language to include a requirement that the State “must promote the deployment *and financing* of renewable energy systems and energy efficiency measures” by enabling municipal corporations to achieve the “important public purpose” of “providing loans *and/or arranging to provide financing* to property owners for the installation of renewable energy systems and energy efficiency measures.” S. 7683, 233d Sess. (N.Y. 2010) (emphasis added).

97. See GEN. MUN. § 119-gg(2).

98. See WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 5, 7.

99. See *supra* text accompanying note 19.

100. See *supra* Part II.A.

101. See *supra* Part II.A.

102. See *supra* Part II.A.

103. See *supra* Part II.A.

104. See N.Y. GEN. MUN. LAW § 119-ee to -gg (McKinney 2010).

105. PACE WHITE PAPER, *supra* note 43, at 23–24.

106. Truth in Lending Act, 15 U.S.C. §§ 1601–1667f (2006). The Board of Governors’ ruling was also based on Regulation Z, 12 C.F.R. § 226 (2009). PACE WHITE PAPER, *supra* note 43, at 23–24.

107. See Regulation Z, 12 C.F.R. § 226, Supp. I, Nt. 2(a)(14)-1 (2009).

108. *Pollice v. Nat’l Tax Funding, L.P.*, 225 F.3d 379 (3d. Cir. 2000).

109. *Id.* at 410; Fair Debt Collection Practices Act, 15 U.S.C. §§ 1692–1692p (2006).

110. Housing and Economic Recovery Act of 2008, Pub. L. No. 110-289, 122 Stat. 2654 (codified as amended in scattered sections of 12, 26, 38 and 42 U.S.C.A.).

111. MARK ZIMRING & MERRIAN FULLER, PACE AND THE FEDERAL HOUSING FINANCE AGENCY (FHFA) 2 (2010), available at [http://eetd.lbl.gov/ea/emp/reports/ee-policybrief\\_031710.pdf](http://eetd.lbl.gov/ea/emp/reports/ee-policybrief_031710.pdf).

112. *Id.*

113. *Id.* at 2–3

114. *Id.* at 1, 4–5.

lenders that “[t]he terms of Fannie Mae/Freddie Mac Uniform Security Instruments prohibit *loans* that have senior lien status to a mortgage.”<sup>115</sup> Freddie Mac’s Industry Letter, for its part, stated that “[t]he purpose of this Industry Letter is to remind Seller/Servicees that an energy-related lien may not be senior to any Mortgage delivered to Freddie Mac.”<sup>116</sup> These letters were followed on July 6, 2010 with a “statement” issued by FHFA expressing its determination that “certain energy retrofit lending programs present significant safety and soundness concerns that must be addressed by Fannie Mae, Freddie Mac and the Federal Home Loan Banks.”<sup>117</sup>

According to the FHFA statement, “[f]irst liens established by PACE loans are unlike routine tax assessments” and “represent a key alteration of traditional mortgage lending practice,” thereby presenting “unusual and difficult risk management challenges for lenders, servicers and mortgage securities investors.”<sup>118</sup> FHFA called for a “pause in such programs so concerns can be addressed” and, while it authorized Fannie Mae and Freddie Mac to honor PACE assessments then in place, it directed these agencies to “undertake actions that protect their safe and sound operations,” including a requirement that loan covenants require approval/consent for any PACE loan.<sup>119</sup> The statement further expressed FHFA’s commitment “to working with federal, state, and local government agencies to develop and implement energy retrofit lending programs with appropriate underwriting guidelines and consumer protection standards.”<sup>120</sup> FHFA Acting Director Edward J. DeMarco followed up a week later with his own statement on the issue, stating that “[h]omeowners should not be placed at risk by programs that alter lien priorities and fail to operate with sound underwriting guidelines and consumer protections,” nor should mortgage holders “be forced to absorb new credit risks after they have already purchased or guaranteed a mortgage.”<sup>121</sup>

The practical effect of the actions by FHFA in issuing its July 6 statement was to bring the PACE programs, in various stages of implementation throughout the country, to a complete halt.<sup>122</sup> The California Attorney General filed suit against FHFA, Fannie Mae and Freddie Mac, pointing out that because Fannie Mae and Freddie Mac “control the mortgage resale market,” their determination with

respect to the PACE model “essentially forecloses residential PACE programs.”<sup>123</sup> According to the complaint, the “pause” requested by FHFA in its July 6 statement “will cause permanent, irreparable damage to PACE, threatening tens of millions of dollars of federal stimulus monies currently allocated for California PACE programs.”<sup>124</sup> The complaint challenges the actions by FHFA, Fannie Mae, and Freddie Mac on three grounds: (1) that their actions violate California law by mischaracterizing the PACE assessments as “loans,” contrary to the definition under California law;<sup>125</sup> (2) that the letters issued by Fannie Mae and Freddie Mac constitute unfair and unlawful acts or practices under California law in that the practical effect of the letters “will be effectively to stop PACE in California, depriving California homeowners of the ability to participate in the program and the State of California of the larger benefits of PACE”;<sup>126</sup> and (3) that FHFA failed to conduct the required environmental review under the National Environmental Policy Act (“NEPA”), given that FHFA’s statement “wip[es] out in a single action a state-law sanctioned program designed to assist homeowners and improve and protect the environment.”<sup>127</sup>

Sonoma County in northern California filed a similar action in federal court challenging the actions of FHFA, Fannie Mae, and Freddie Mac, claiming that its Sonoma County Energy Independence Program (“SCEIP”) is “jeopardized” by the determinations with respect to PACE.<sup>128</sup> SCEIP is described as the nation’s largest PACE program, which to date has helped over 1,044 property owners fund energy and water efficiency improvements on their homes and businesses through property assessments.<sup>129</sup> Similar to the action by the California Attorney General, the Sonoma County complaint alleges that FHFA, Fannie Mae, and Freddie Mac mischarac-

115. Letter from Marianne E. Sullivan, Senior Vice President, Single-Family Chief Risk Officer, Fannie Mae, to All Fannie Mae Single-Family Sellers and Servicers (May 5, 2010), available at <https://www.efanniemae.com/sf/guides/ssg/annlrs/pdf/2010/111006.pdf>. (emphasis added).

116. Letter from Patricia J. McClung, Vice President of Offerings Management, Freddie Mac, to Freddie Mac Seller/Servicees (May 5, 2010), available at <http://www.freddiemac.com/sell/guide/bulletins/pdf/iltr050510.pdf>.

117. Press Release, Fed. Hous. Fin. Agency, *FHFA Statement on Certain Energy Retrofit Loan Programs* (July 6, 2010), available at <http://www.fhfa.gov/webfiles/15884/PACESTMT7610.pdf>.

118. *Id.*

119. *Id.*

120. *Id.*

121. Press Release, Fed. Hous. Fin. Agency, *Statement of FHFA Acting Director Edward J. DeMarco on PACE Programs* (July 14, 2010), available at [http://www.fhfa.gov/webfiles/15963/PACE\\_ststatement\\_7\\_14\\_10.pdf](http://www.fhfa.gov/webfiles/15963/PACE_ststatement_7_14_10.pdf) [sic].

122. According to Cisco DeVries, president of an organization that helps set up energy efficiency programs, “Virtually all the [PACE] programs around the country have ground to a complete stop.” Tiffany Hsu, *Loan Program for Green Home Upgrades Stalls*, L.A. TIMES, Aug. 19, 2010, <http://articles.latimes.com/2010/aug/19/business/la-fi-pace-20100819>.

123. Complaint for Declaratory and Equitable Relief (Unfair Business Practices; Violation of the National Environmental Policy Act) at 2-3, California *ex rel.* Brown v. Fed. Hous. Fin. Agency, No. C10-03084 (N.D. Cal. July 14, 2010) [hereinafter California *ex rel.* Brown Complaint].

124. *Id.*

125. *Id.* at 8. According to the complaint, California state law is “clear” that “PACE financing is not accomplished through loans, but through assessments,” and thus FHFA’s statement “misrepresents” the law in California, and attempts to change the priority of liens resulting from PACE assessments. *Id.*

126. *Id.* at 10. According to the complaint, the actions violate section 17200 of the California Business and Professional Code as being unfair and unlawful “in that they constitute intentional interference with the prospective economic advantage, including the advantage that otherwise would flow to homeowners, in the form of lower energy and water bills and favorable financing, and to the State of California in the form of federal monies.” *Id.*

127. *Id.* at 11. Under NEPA, a major federal action that may significantly impact the human environment cannot be approved without an Environmental Assessment (“EA”) or an Environmental Impact Statement (“EIS”). NEPA, 42 U.S.C. §§ 4321–4347 (2006). FHFA is a federal agency, and the complaint alleges that because the agency’s July 6 statement “for all intents and purposes forecloses residential PACE programs in California and across the nation,” it is a “major federal action” within the scope of NEPA that “may significantly affect the human environment.” *Id.* at 13–14. According to the complaint, FHFA failed “to evaluate the effects of its action on the human environment through an EA or EIS.” *Id.* at 14.

128. Press Release, County of Sonoma, County Files Suit in Federal Court to Save Innovative Energy Program (July 27, 2010), available at [http://www.drivecms.com/uploads/sonomacountyenergy.org/County\\_Files\\_in\\_Federal\\_Court\\_to\\_Save\\_Innovative\\_Energy\\_Program.pdf](http://www.drivecms.com/uploads/sonomacountyenergy.org/County_Files_in_Federal_Court_to_Save_Innovative_Energy_Program.pdf).

129. *Id.*

terized California law by treating PACE financing as “loans” rather than “assessments.”<sup>130</sup>

In addition to the legal challenges to the federal housing agency actions, members of both the U.S. House of Representatives and the U.S. Senate have proposed legislation to restore the PACE program. Thirty members of the U.S. House of Representatives, led by Congressman Mike Thompson from California, joined together to support the PACE Assessment Protection Act of 2010, which would ensure that the underwriting standards of Fannie Mae and Freddie Mac facilitate the use of PACE programs.<sup>131</sup> The legislation specifically states that the underwriting standards of Fannie Mae and Freddie Mac facilitate the use of PACE financing.<sup>132</sup> California Senator Barbara Boxer introduced a similar measure in the Senate,<sup>133</sup> while New York Congressman Steve Israel proposed a thirty month PACE pilot project that would allow up to 300,000 homes “to test the FHFA’s concerns over increasing mortgage risk.”<sup>134</sup>

#### F. Benefits of the PACE Model

A significant benefit of the PACE model is that it should result in attractive financing costs for participating property owners. Because the financing is secured through the use of a lien, it provides a less risky payback arrangement for lenders.<sup>135</sup> In the event of foreclosure, the municipality or other investor is repaid prior to other creditors.<sup>136</sup> This reduced risk for PACE lenders should result in lower borrowing costs for program participants, inasmuch as participation in PACE programs is entirely voluntary, and the resulting improvements can be expected to generate both utility savings and an increase in property values.<sup>137</sup> This reduced risk may allow PACE financing to be offered to property owners without requiring a down payment of any type.<sup>138</sup> On this point, PACE bond holders and investors are encouraged by the very low investment risk resulting from the seniority of the PACE lien to mortgage debt.<sup>139</sup> According to PACEnow.org’s analysis of potential risks to lenders, “97% of property taxes are current [and] losses are less than 1%.”<sup>140</sup> Of course, the fact that PACE liens would be senior to first mortgage debt is the characteristic cited by FHFA as representing “a key alteration

of traditional mortgage lending practice,” and thus triggering the virtual suspension of PACE programs until the competing interests can be addressed.<sup>141</sup>

Moreover, by requiring the repayment through a property tax charge, the municipality effectively ensures that ample funding remains available in a “revolving loan fund” that will continue generating a source of capital over several years.<sup>142</sup> An analysis of PACE programs by the U.S. Department of Energy (“DOE”) has also noted that the principle of “economies of scale” is a driving force behind these programs by making funds available to a large category of property owners while reducing overhead and transaction costs.<sup>143</sup>

Another benefit of the PACE model is that it will likely provide improved access to capital for property owners who may not otherwise be able to obtain financing on reasonable terms. Eligibility for participating in a PACE financing program is determined primarily according to the specific risks associated with the property<sup>144</sup> rather than an applicant’s general creditworthiness or overall credit history. Therefore, property owners with a good payment history on property taxes and mortgage debt, but with poor general credit, can still receive financing for energy efficiency upgrades at more reasonable interest rates than they would otherwise be able to obtain. This aspect of the PACE program was also cited by FHFA in its July 6 statement; according to the statement, “[u]nderwriting for PACE programs results in collateral-based lending rather than lending based upon ability-to-pay.”<sup>145</sup>

Although the FHFA statement calls only for a “pause” in the implementation of PACE programs,<sup>146</sup> there is no clearly defined process or schedule for resolving the concerns raised by FHFA. As noted in the California ex rel. Brown Complaint, “there is no schedule for the agency to revisit its determination and no guarantee that it will authorize PACE to proceed.”<sup>147</sup> Moreover, the complaint notes that “any pause in PACE at this critical juncture likely is the death knell of widespread, effective PACE programs in California.”<sup>148</sup> Similarly, prospects for action on the proposed legislation—the PACE Assessment Protection Act of 2010—are uncertain, considering the Senate’s inability to reach agreement on any energy- or climate-related legislation throughout the 111<sup>th</sup> session of Congress. Given the gridlock experienced in the executive branch, with one federal agency (FHFA) essentially hamstringing a program heavily supported by the White House, the Department of Energy, and \$150 million in ARRA funding, a legislative solution may be the best means for expeditiously moving the PACE program forward.

130. *Id.*

131. PACE Assessment Protection Act, H.R. 5766, 111th Cong. (2010).

132. Section 2 of the legislation provides that “[l]iens or other property obligations that secure property taxes or assessments under a PACE program and are consistent with such standards shall be considered to comply with the [Fannie Mae and Freddie Mac] Uniform Instruments . . . and shall not constitute a default on an existing mortgage or trigger the exercise of lender’s remedies for a property with such a lien.” *Id.*

133. S. 3642, 111th Cong. (2010).

134. Jonathan Hiskes, *Fate of PACE Clean-Energy Programs About to Become Clearer*, GRIST (July 20, 2010 1:18 PM), <http://www.grist.org/article/2010-07-20-fate-of-pace-clean-energy-programs-about-to-become-clearer/>.

135. See PACE Now, PACE PROGRAMS: HISTORICAL PRECEDENT, SENIORITY, AND BENEFITS TO EXISTING LENDERS 1–2 (2010), available at <http://pacenow.org/documents/PACE%20Mortgage%20Seniority%20Memo%202.4.10.pdf>.

136. *See id.*

137. *See id.* at 3.

138. WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 1.

139. PACE Basics, PACE Now, <http://pacenow.org/blog/> (last visited Aug. 8, 2010).

140. *Id.*

141. FHFA Statement on Certain Energy Retrofit Loan Programs, *supra* note 117.

142. See State and Municipal Revolving Loan Funds, U.S. DEPT OF ENERGY, <http://www1.eere.energy.gov/wip/solutioncenter/financialproducts/revolvingloan-funds.html> (last visited Sept. 12, 2010).

143. WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 1.

144. *See id.* at 7.

145. FHFA Statement on Certain Energy Retrofit Loan Programs, *supra* note 117.

146. *Id.*

147. California ex rel. Brown Complaint, *supra* note 123, at 8.

148. *Id.*

### III. On-Bill Recovery

#### A. Overview of the Elements of On-Bill Recovery

On-bill recovery (also known as “on-bill financing”) is a mechanism similar to PACE in that the repayment obligation is not tied to a particular borrower, but rather “runs” with the premises. In the case of on-bill recovery, the repayment obligation is tied to the utility meter.<sup>149</sup> A surcharge is assessed against the premises to recover the costs of the energy efficiency improvements installed on the premises, and the obligation is repaid through a surcharge on the utility bill.<sup>150</sup> Similar to PACE, on-bill recovery attempts to address the concern that an occupant may vacate the premises prior to the end of the payback period for energy efficiency measures. With on-bill recovery, the obligation “runs” with the meter, and the subsequent occupant of the premises will “inherit” the obligation—to be repaid through the utility bill—and, correspondingly, will “inherit” the remaining benefits of the installed energy efficiency measures through lower utility bills for the remaining useful life of those measures.<sup>151</sup> Similar to PACE, it is expected that the benefits from the energy efficiency measures—through the reduced utility bills—will more than offset the repayment of the initial obligation, thus producing immediate cash flow savings for the participating utility customer.<sup>152</sup>

An early form of on-bill recovery, known as “Pay As You Save,” or PAYS<sup>®</sup>, was developed in 1999 by Paul A. Cillo and Harlan Lachman, principals of the Energy Efficiency Institute, and was first employed in a pilot program offered by two New Hampshire utilities.<sup>153</sup> PAYS<sup>®</sup> possesses the essential elements that have evolved into the template for an on-bill financing program. These elements are as follows:

1. Financing for the up-front costs of energy efficiency measures can be provided either by the serving electric or natural gas utility, or from third-party lenders.<sup>154</sup>
2. Loans are repaid over a period of time that corresponds to the useful lives of the energy efficiency measures installed.<sup>155</sup> The repayment occurs through a separately identified charge on the occupant’s utility bill.<sup>156</sup> Because the obligation “runs” with the utility meter, occupants can finance measures with payback periods that last beyond their particular ownership.<sup>157</sup> There is no obligation to pay for fixed measures after the

premises are vacated.<sup>158</sup> The monthly charge remains on the utility bill for that location until all costs are recovered.<sup>159</sup>

3. An independent third party certifies the savings claims and the appropriateness of installed energy efficiency measures.<sup>160</sup>
4. As a result of the longer repayment period and the utility bill surcharge, occupants stand to benefit from additional cash flow early in the program. The monthly surcharge is designed to be lower than the estimated savings produced by the energy efficiency measures.<sup>161</sup>
5. Because the energy efficiency-related surcharges are collected through utility tariffs using the same collection mechanism as all other utility charges, third-party lenders have reduced repayment risk, which should lead to more favorable financing terms.<sup>162</sup>

#### B. New York’s Experience with On-Bill Recovery

##### I. Endorsement by the New York State Public Service Commission

In May 2007, the New York State Public Service Commission (“PSC”) adopted the goal of achieving a fifteen percent reduction in electricity usage from expected levels by 2015, or a “15 by 15” target.<sup>163</sup> It commenced a proceeding to establish an Energy Efficiency Portfolio Standard (“EEPS”) designed to achieve this objective.<sup>164</sup> In an order issued thirteen months later, in June 2008, the PSC authorized an expanded energy efficiency program designed to achieve the necessary megawatt-hour reductions in electricity usage to put the jurisdictional utilities on a “forecast trajectory” that would achieve the desired fifteen percent reduction in electricity usage by the year 2015.<sup>165</sup> To provide the funding necessary to support the expansion of energy efficiency programs, the *EEPS Order* increased the System Benefit Charge (“SBC”)—the surcharge on electricity bills which generates the funding to support energy efficiency programs—from \$175 million to \$334.3 million annually.<sup>166</sup>

The *EEPS Order* also endorsed the use of “on-bill financing” as a means of achieving energy efficiency targets in a

149. MATTHEW BROWN, PAYING FOR ENERGY EFFICIENCY UPGRADES THROUGH UTILITY BILLS 1 (2008), available at <http://www.ma-ecac.org/docs/On-Bill-FinancingASEBriefMatthewBrown.pdf>.

150. *Id.*

151. *Id.*

152. *Id.* at 2.

153. *Statement of Qualifications: Paul A. Cillo & Harlan Lachman*, ENERGY EFFICIENCY INST. (2009), <http://www.eeivt.com/CorpQual2009.pdf>.

154. PAUL A. CILLO & HARLAN LACHMAN, ENERGY EFFICIENCY INST., PAY-AS-YOU-SAVE ENERGY EFFICIENCY PRODUCTS: RESTRUCTURING ENERGY EFFICIENCY 8 (1999), available at [http://www.eeivt.com/EEI\\_Pays\\_1st\\_paper.pdf](http://www.eeivt.com/EEI_Pays_1st_paper.pdf) [hereinafter PAY-AS-YOU-SAVE REPORT].

155. *Id.* at 8.

156. *Id.* at 8–9.

157. *Id.* at 8.

158. *Id.*

159. *Id.*

160. PAUL A. CILLO & HARLAN LACHMAN, ENERGY EFFICIENCY INST., MORE DISTRIBUTED GENERATION WITH PAY-AS-YOU-SAVE 5 (2001), available at [http://www.eeivt.com/EEI\\_Pays\\_2nd\\_paper.pdf](http://www.eeivt.com/EEI_Pays_2nd_paper.pdf).

161. *Id.* at 2.

162. *Id.* at 5.

163. Order Instituting Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard (EEPS), Case 07-M-0548, at 3 (N.Y. Pub. Serv. Comm’n May 17, 2007) [hereinafter Order Instituting EEPS Proceeding].

164. *Id.* at 1, 3.

165. Order Establishing EEPS and Approving Programs, Case 07-M-0548, at 3 (N.Y. Pub. Serv. Comm’n June 23, 2008) [hereinafter Order Establishing EEPS].

166. *Id.* at 69.

cost effective manner.<sup>167</sup> Citing the “great potential value in on-bill financing,” the *EEPS Order* stated that this particular mechanism “can eliminate a major barrier to participation in efficiency programs for customers that lack ready access to capital.”<sup>168</sup> It also stated that on-bill financing “can, in the long-run, reduce reliance on ratepayer-funded programs to achieve the State’s efficiency goals, thereby mitigating any disparities between total bills of participants and non-participants.”<sup>169</sup> An advantage of on-bill financing, according to the *EEPS Order*, is that it “allow[s] a customer to finance its share of program costs directly through utility bills without any cash outlay[,] [b]ecause efficiency measures should reduce a customer’s bill by more than the customer’s share of program costs.”<sup>170</sup> As stated in the *EEPS Order*, “[t]hrough on-bill financing, utilities can serve a long-term strategy of reducing the need for ratepayer-funded programs and increasing the percentage of financial contributions from direct program participants.”<sup>171</sup>

The *EEPS Order* acknowledges that an advantage of on-bill financing versus ratepayer-funded energy efficiency programs is that it should reduce the ultimate cost to the utility and its ratepayers of achieving the energy efficiency savings.<sup>172</sup> In contrast to energy efficiency programs where the utility offers grants or rebates to ratepayers to promote installation of energy efficiency measures, on-bill financing requires increased participation by the direct program participant (the ratepayer) through payment for the measure, over time, in the form of surcharges on the utility bill.<sup>173</sup> This results in more funding—in the form of “loans” repaid through the utility bill—being provided by the ratepayer, in whose premises the energy efficiency measure is installed (the direct program recipient), and a smaller portion of the cost being borne by the utility and its other ratepayers to achieve those efficiency savings. In calculating the cost of achieving the energy efficiency savings necessary to reach the “15 by 15” target, the *EEPS Order* assumed that approximately 6.2% of the megawatt-hours would be acquired through on-bill financing rather than programs funded entirely by ratepayers.<sup>174</sup>

## 2. Implementation Issues

Substantial implementation issues needed to be resolved before on-bill recovery programs could be successfully

implemented. The *EEPS Order* noted that “legal and technical issues” had been raised with respect to on-bill recovery, including “the manner in which customer non-payment would be treated” and the varying ability of existing utility billing systems to implement on-bill recovery, given the additional accounting requirements associated with tracking repayment of the initial capital outlay for the energy efficiency measures.<sup>175</sup> The PSC, therefore, commenced a second phase of the proceeding to identify and resolve the issues related to on-bill recovery, with the expectation that a “favorable resolution” of these issues “would be followed by a requirement for utilities to submit programs to attain [their assigned] portion of” the “15 by 15” target through on-bill recovery mechanisms.<sup>176</sup>

A “working group” focused on the legal and technical issues associated with on-bill financing was convened in July 2008 and issued its final report in December 2008.<sup>177</sup> The working group failed to achieve consensus on many of the issues, and the PSC initiated a docket in May 2009 for purposes of exploring the unresolved issues further through a “pilot” on-bill financing program for residential and small commercial gas customers in two of National Grid’s “down-state” service territories, KeySpan Energy Delivery New York and KeySpan Energy Delivery Long Island.<sup>178</sup> Although the original intent of the proceeding was to develop and recommend for PSC approval a pilot on-bill financing program, the process identified “some very difficult hurdles” that could not be “eliminated or sufficiently mitigated by program design alone.”<sup>179</sup> Rather than recommending a program for implementation in New York, the parties to the proceeding developed a report that summarizes the findings and itemizes the issues involved with establishing an on-bill financing pilot for gas customers in New York.<sup>180</sup>

This *Final Report* provides a good overview of the challenges to implementing an on-bill financing program, and provides a helpful checklist for the type of regulatory and legal issues that other states may face in initiating an on-bill recovery program.<sup>181</sup> The *Final Report* also quantifies some of the financial benefits of using on-bill recovery to finance energy efficiency measures and confirms that on-bill recovery may facilitate access to capital for utility customers who may not otherwise be able to obtain financing, and on more favorable terms.<sup>182</sup> In addition to the financial benefits associated with access to capital and favorable financing terms, the *Final Report* observes that on-bill recovery would offer the advantage to customers of “one-stop shopping.”<sup>183</sup> Specifically, if an on-bill recovery program were in place, “[t]he cus-

167. *Id.* at 50.

168. *Id.*

169. *Id.*

170. *Id.* at 60.

171. *Id.* at 49. The *Order Establishing EEPS* also refers to on-bill financing as “Conservation TIP” which is “shorthand for Conservation Tariffed Installation Program.” *Id.* at 60 n.34. “Under Conservation TIP, a utility or a third party finances the installation of energy efficiency improvements on a customer’s premises and the customer pays its share of costs for the improvements through its utility bills, which are no higher than before the installation because the energy savings offset the capital costs.” *Id.*

172. *See id.* at 60.

173. *See id.* at 12 n.11.

174. *Id.* at app. 1 at 6–7 tbls.6 & 7 (indicating that 480,443 MWh would be acquired through “on-bill financing” out of a cumulative total of 7,687,095 MWh).

175. *See id.* at 61.

176. *See id.*

177. *See Working Grp. VI On-Bill Financing Final Report*, Case 07-M-0548, at 2 (N.Y. Pub. Serv. Comm’n Dec. 19, 2008).

178. *See Notice of a New Proceeding on a Pilot On-Bill Financing Program*, Case 09-M-0465, at 2 (N.Y. Pub. Serv. Comm’n May 27, 2009).

179. *On-Bill Financing Report*, Case 09-M-0465, at 1–2 (N.Y. Pub. Serv. Comm’n Oct. 30, 2009) [hereinafter *Final Report*].

180. *See id.* at 2.

181. *See id.* at 1–27.

182. *See Order Establishing EEPS*, *supra* note 165, at 60 app. 1, tbl.6 & 7.

183. *Id.* at 16.

tomers would be able to arrange for purchase and installation of high efficiency equipment and obtain financing directly through the [utility]. The [c]ustomer will also be able to make loan payments through their monthly utility bills, avoiding the requirement of paying an additional bill.”<sup>184</sup>

### 3. Legal and Regulatory Barriers

New York law contains a number of legal and regulatory barriers that could hinder these programs. First, there is a statutory barrier that was determined in the *Final Report* to likely preclude an on-bill financing program, at least in the case of gas utilities.<sup>185</sup> New York Public Service Law provides that “[n]o [gas] corporation shall make or impose an additional charge or fee for service or for the installation of apparatus or the use of apparatus installed.”<sup>186</sup> Although the statute contains a number of exceptions to this prohibition, none applies to payments for on-bill recovery of the costs of energy efficiency measures.<sup>187</sup> With respect to whether an energy efficiency charge would be “for service” and thus prohibited by the statute, case precedent in New York distinguishes between “service charges” and “minimum charges,” and has construed “service” broadly.<sup>188</sup> According to the New York State Supreme Court, Appellate Division:

The test to apply is this: Does the customer have to pay if he uses no gas? If he does, it is a service charge. It is a charge made for ‘readiness to serve’; if the customer pays nothing unless he uses some gas, it is not a service charge but a rate under the jurisdiction of the Public Service Commission.<sup>189</sup>

The on-bill recovery charge would be a fixed amount on the customer’s bill, unrelated to the amount of commodity used. In contrast to a “minimum charge,” which is absorbed in the customer’s bill when the minimum has been reached—and which has been upheld by the courts<sup>190</sup>—a charge to recover the costs of energy efficiency measures would likely be an “additional charge” for “installation of apparatus” prohibited by the statute.<sup>191</sup> Recently, the New York State Legislature removed the statutory impediment to on-bill recovery by adding a new subsection to the statute creating an exception “for installation of capital improvements and fixtures to promote energy efficiency upon the request and consent of the customer.”<sup>192</sup>

Another legal issue is whether the utility may disconnect service for non-payment of the energy efficiency financing

portion of the bill.<sup>193</sup> In New York, the Home Energy Fair Practices Act (“HEFPA”)<sup>194</sup> governs the disconnection of utility service to residential customers. Section 32 of the Public Service Law allows utility service to be terminated for non-payment of “charges for *any service rendered* during the preceding twelve months.”<sup>195</sup> Disconnection for failure to pay the on-bill financing portion of the bill is thus available only if the financing for energy efficiency measures is considered a “service rendered.” The *Final Report* does not reach a conclusion as to whether financing for energy efficiency measures constitutes a “service rendered” for purposes of HEFPA.<sup>196</sup> It should be noted that the position of one of the parties to the process that produced the *Final Report*—the New York State Consumer Protection Board (“CPB”)—is that construing financing for energy efficiency measures as a service rendered “would greatly compromise the intent of HEFPA, which is to enforce the policy of the State that continued provision of service is necessary for the preservation of the health and general welfare and is in the public interest.”<sup>197</sup> According to the CPB, residential customers should not be disconnected “based on arrears amounts owed for other than their direct utility service.”<sup>198</sup>

With respect to disconnection of non-residential customers, there is no corresponding statute in New York governing the termination of utility service. The circumstances under which service may be terminated are governed by the PSC’s regulations, which allow for termination of service for failure to pay “any tariff charge due on the customer’s account.”<sup>199</sup> The *Final Report* concludes that the on-bill recovery charge would be a tariff charge, “thereby allowing termination for failure to pay the charge” if the PSC makes the policy determination to implement on-bill recovery.<sup>200</sup>

Various financing and lending laws may also come into play, depending upon the design of an on-bill recovery program, the source of the funding, and the relationship of the funding entity with the other parties.<sup>201</sup> The federal statutes

193. As discussed below, the ability of the utility to disconnect for non-payment of the financing obligation affects the level of risk—and thus the attractiveness of the financing terms—borne by third-party lenders. If the utility can disconnect for non-payment of the energy efficiency financing portion of the bill, it is more likely that customers will pay the portion of the bill associated with energy efficiency improvements, and thus lenders assume less risk in providing funds for energy efficiency investments.

194. N.Y. PUB. SERV. LAW §§ 30–52, (McKinney 2000); 16 N.Y. COMP. CODES R. & REGS. tit. 16 § 11 (2008).

195. N.Y. PUB. SERV. LAW § 32(a) (McKinney 2000) (emphasis added).

196. *Final Report*, *supra* note 179, at 11.

197. Letter from Mindy A. Bockstein, Chairperson and Exec. Dir., N.Y. State Consumer Prot. Bd., to Jaclyn Brilling, Sec’y, N.Y. State Dep’t of Pub. Serv. 3 (Nov. 20, 2009), <http://documents.dps.state.ny.us/public/Common/ViewDoc.aspx?DocRefId={7AFA34A6-8590-4204-86F2-C9565744DC6B}>.

198. *Id.*

199. N.Y. COMP. CODES R. & REGS. tit. 16 § 13.3(a)(i).

200. *Final Report*, *supra* note 179, at 11.

201. In New York, various other state statutes may come into play as well. These include article 29(H) of the General Business Law, N.Y. GEN. BUS. LAW §§ 600–603 (McKinney 1996), which is the New York State equivalent of the Fair Debt Collection Practices Act; article 9 of the New York Banking Law, N.Y. BANKING LAW §§ 340–361 (McKinney 2008), which establishes licensing requirements for lenders that provide personal credit to individuals for personal or household purposes; and the Fair Credit Reporting Act, article 25 of the General Business Law, N.Y. GEN. BUS. LAW §§ 380–380-u (McKinney 1996), the New York State equivalent of the Equal Credit Opportunity Act.

184. *Id.*

185. *Id.* at 5.

186. N.Y. PUB. SERV. LAW § 65(6) (McKinney 2000).

187. The statute authorizes a charge: (a) where entry for purposes of inspection of meters, pipes, fittings, wires, and works is denied; (b) for reconnecting service; (c) for expenses associated with meter tampering and theft of service, and (d) “for a remote meter reading device upon the request and consent of the customer.” *Id.*

188. *Kovarsky v. Brooklyn Union Gas Co.*, 3 N.Y.S.2d 581, 581 (N.Y. App. Div. 1938).

189. *Id.*

190. *Mykolyn v. Consol. Edison Co. of N.Y.*, 389 N.Y.S.2d 996, 998–999 (NY Sup. Ct. 1976).

191. N.Y. PUB. SERV. LAW § 65(6) (McKinney 2000).

192. *See* 2010 N.Y. Consol Laws Adv. Legis. Serv. \*1 (LexisNexis).

that are potentially implicated include TILA,<sup>202</sup> the Equal Credit Opportunity Act (“ECOA”),<sup>203</sup> FDCPA,<sup>204</sup> and the Fair Credit Reporting Act (“FCRA”).<sup>205</sup> TILA prescribes disclosure requirements for loan terms, particularly the calculation of applicable interest rates.<sup>206</sup> ECOA bars discrimination in the provision of credit on the basis of race, color, religion, national origin, sex, marital status, or receipt of public assistance.<sup>207</sup> FDCPA regulates the collection practices of debt collectors, and applies to debts created when credit is extended to a consumer for consumer purposes.<sup>208</sup> Finally, FCRA establishes requirements for lenders that make use of credit agencies to screen credit applicants.<sup>209</sup> States and municipalities must consider these federal and state legal and regulatory barriers when considering adopting on-bill recovery programs such as New York’s.

#### 4. Administrative Issues

An issue that most utilities will likely face in implementing and administering an on-bill recovery program is the capacity of the information and billing system to accommodate the data collection and processing associated with adding a separate “line item” on the utility bill for energy efficiency charges and tracking individual account payments and balances. In addition, if third-party financing is used, the utility must be able to communicate regularly with the external systems of program administrators and lenders. In the case of the two utilities participating in the pilot on-bill recovery proceeding in New York, National Grid estimated that development of the necessary information technology to properly configure each of the two systems to handle an on-bill financing program would cost a minimum of \$1.2 million.<sup>210</sup> Additional costs would be associated with including in the program design the features necessary to accommodate a meter-based obligation or third-party financing.<sup>211</sup> In the case of National Grid’s upstate operations (in the Niagara Mohawk service territory), the implementation of the same type of system upgrades would cost only about \$100,000.<sup>212</sup> Thus, the cost for an individual utility would depend upon the technological capability of its existing system, as well as the available capacity for accommodating additional tracking of payments and balances.

Another administrative issue relates to the assignment of the obligation to the meter at a particular location, rather than to the individual customer installing the energy effi-

ciency measure.<sup>213</sup> If the obligation “runs with the meter,” the existing customer is responsible only for those monthly energy efficiency charges that accrue while that customer receives service at that location,<sup>214</sup> with successor customers assuming responsibility for the obligation when they take occupancy of the premises.<sup>215</sup> As in the case of PACE financing, this ability to “pass on” the obligation to a successor occupant addresses the barrier associated with the possibility of the customer relocating before the end of the useful life of the energy efficiency measures installed.<sup>216</sup> If the obligation “runs with the meter,” the successor occupant—who will enjoy the energy savings benefits of the remaining useful life of the energy efficiency measures—will assume the obligation, and the existing occupant will cease being responsible for further payments toward the improvement.

A complicating factor, however, is the situation where there is premise vacancy at the meter location and there is no “open account” at the particular meter.<sup>217</sup> In this situation, “there is no customer to make payments toward the obligation but the energy efficiency measure continues to age.”<sup>218</sup> An issue to be addressed, therefore, is the allocation of the risk associated with the event of a premise vacancy, which “can be allocated to [1] the program itself, [2] the funding source, [3] the premise owner[,] [4] a potential incoming customer[,] or [5] spread among any number of these entities.”<sup>219</sup> Ideally, this risk should be allocated “in a manner that maximizes the attractiveness of the program but minimizes administrative and financing costs of the program.”<sup>220</sup>

An additional administrative issue in the “obligation runs-with-the-meter” scenario is the requirement of utility tariff provisions that prescribe fair procedures for dealing with the issues associated with transferring the on-bill recovery obligation between customers. For example, participating property owners (in the case of owner-occupied property) and landlords (in the case of rental property) would be required, as a condition of continuing utility service, to affirmatively notify subsequent owners and incoming tenants of the existing on-bill recovery obligation.<sup>221</sup> On this issue, the *Final Report* recommends that “[p]articipating customers should be required to enter into agreements requiring disclosures similar to the disclosure currently required of individuals . . . offering to sell real property against which a utility [assessment] for a service line extension [exists].”<sup>222</sup> Constructive notice of the obligation can also be effected through recording the financing agreement with the appropriate land and title records.<sup>223</sup>

202. Truth in Lending Act, 15 U.S.C. §§ 1601–1667f (2006).

203. Equal Credit Opportunity Act, 15 U.S.C. §§ 1691–1691f (2006).

204. Fair Debt Collection Practices Act, 15 U.S.C. §§ 1692–1692p (2006).

205. Fair Credit Reporting Act, 15 U.S.C. §§ 1681–1681x (2006).

206. See 15 U.S.C. §§ 1601–1667f.

207. 15 U.S.C. § 1691(a)(1)–(2). This statute would apply to a utility in the event it regularly extends, renews or continues credit. 15 U.S.C. § 1691a(e).

208. 15 U.S.C. § 1692a(6).

209. 15 U.S.C. §§ 1681–1681x.

210. Final Report, *supra* note 179, at 5. KeySpan Energy Delivery New York and KeySpan Energy Delivery Long Island are the downstate operating gas divisions of National Grid. *Id.* at 1.

211. *Id.* at 5.

212. *Id.*

213. *Id.* at 24.

214. *Id.*

215. *Id.*

216. See *id.*

217. *Id.*

218. *Id.*

219. *Id.* at 25.

220. *Id.* at 25–26.

221. *Id.* at 26.

222. *Id.* In these circumstances, section 242 of the Real Property Law requires written notice of the utility surcharge to the prospective purchaser prior to accepting a purchase offer and prescribes the form of statement to be used. N.Y. REAL PROP. § 242(1)(a) (McKinney 2006).

223. Final Report, *supra* note 179, at 27.

## 5. Financial Benefits of the On-Bill Recovery Model

The funds to cover the initial capital outlay for energy efficiency measures under an on-bill recovery model can be provided by either the serving utility or a third-party lender.<sup>224</sup> In the case of utility-provided funding, the utility would likely impose a customer surcharge to generate the funds necessary to support the loan account.<sup>225</sup> “[D]epending upon the number and amount of loans, the funding requirements have the potential to be very significant.”<sup>226</sup> Because of these potentially significant funding requirements, a utility-provided funding approach, utilizing surcharges to generate initial capital reserves, would likely be “undesirable and impractical due to the large bill impact.”<sup>227</sup> The pilot on-bill financing proceeding thus devoted considerable attention to third-party financing as a means of reducing the costs to the utility and its customers of implementing an on-bill recovery program.<sup>228</sup>

One such third-party financing model is the “Energy Efficiency Securitization Financing Structure,” developed by Peregrine Energy Group and presented in the pilot on-bill financing proceeding by National Grid.<sup>229</sup> Under the “Peregrine Model,” “[a]n Energy Efficiency Investment Fund (“EEIF”) [is] created to facilitate the funding and implementation of energy efficiency improvements for [utility] customers.”<sup>230</sup> These customers sign the financing agreement with EEIF, which then bundles the agreements and places them in an Asset Trust, which uses the bundled agreements as collateral to raise ninety to ninety-five percent of the total loan fund necessary to support the program from a lender or investment group.<sup>231</sup> The remainder of the fund (five to ten percent) is expected to be provided from a separate source;<sup>232</sup> in New York, this funding could come from a surcharge on utility bills, proceeds from the auction of carbon allowances under the Regional Greenhouse Gas Initiative,<sup>233</sup> or the fund created by the Green Jobs/Green New York Act<sup>234</sup> signed into law in late 2009.<sup>235</sup>

“Participating customers would make payments on the loans in their regular monthly utility bills[,] [and] National Grid would act as collection agent for the Asset Trust.”<sup>236</sup> The Asset Trust would then make the required principal and interest payments to the lenders, which would assume all default risk.<sup>237</sup> The utility customers would pay a slightly

higher interest rate on their loans than the rate at which the lender group would provide the funds to the Asset Trust, thereby providing some margin to cover administrative costs and reserve requirements.<sup>238</sup> The target credit rating for the debt offering is AA from Standard & Poor’s and Aa2 from Moody’s Investor Services.<sup>239</sup> Because of these favorable credit ratings,<sup>240</sup> the rates charged to participating customers are expected to be competitive with home equity financing, or in the range of 5.5% to 8.5%, according to preliminary figures provided by National Grid.<sup>241</sup>

Importantly, “[t]he eligibility requirements for the program would establish a certain credit quality for the *pool* of loans in the program[,] . . . [with] no individual underwriting of participating customers.”<sup>242</sup> Eligibility would be “based on customers’ performance as utility customers,” taking into account factors “such as minimum time that accounts must be current with utility bills,” rather than overall credit worthiness.<sup>243</sup> Underwriting the program participants collectively, rather than individually, is expected to result in “a lower interest rate than would likely be otherwise available to many customers.”<sup>244</sup>

In summarizing the financial benefits to customers under this particular form of on-bill recovery, National Grid noted that “[t]he program can be designed so that the offered interest rate is well below market rates” and, because of the pooled underwriting approach, “[t]he program may be available to customers who otherwise may not have access to financing.”<sup>245</sup> The knowledge gained in the pilot on-bill recovery proceeding regarding the ability of a third-party financing program to capture these financial benefits is a significant positive development. Although much of the *Final Report* focused on the legal and regulatory barriers and the administrative and implementation challenges associated with an on-bill recovery program, the most noteworthy development from the process was the information learned about the potentially favorable terms under which a third-party lender would participate in an on-bill recovery program.

There seems to be substantial interest in the venture capital markets in opportunities to invest in energy efficiency. Investors are shifting their focus from renewable energy ventures to energy efficiency, given the perceived lower risk associated with energy efficiency and its current commercial availability, in comparison to emerging solar and other renewable energy technologies.<sup>246</sup> Energy efficiency products have “lower fund-

224. *Id.* at 16–18.

225. *Id.* at 17.

226. *Id.*

227. *Id.* at 17.

228. *See, e.g., id.* at 18–22.

229. *Id.* at 18.

230. *Id.*

231. *Id.*

232. *Id.*

233. *Id.*

234. Green Jobs/Green New York Program, N.Y. PUB. AUTH. L. §§ 1890–1899a (McKinney 2010).

235. N.Y. PUB. AUTH. L. § 1896 (establishing the green jobs-green New York revolving loan fund).

236. Final Report, *supra* note 179, at 18.

237. *Id.* at 18–19.

238. *Id.*

239. *Id.* at 20.

240. By comparison, the rating for KeySpan Gas East Corporation’s senior unsecured debt is A from Standard & Poor’s and A3 from Moody’s Investor Services. *Senior Unsecured / Short Term Rating*, NAT’L GRID (Aug. 24, 2010), <http://www.nationalgrid.com/corporate/Investor+Relations/DebtInvestors/Creditratings/>.

241. Final Report, *supra* note 179, at 19.

242. *Id.* at 20.

243. *Id.*

244. *Id.* at 21.

245. *Id.* at 16.

246. *See* Press Release, Ernst & Young, Venture Capital 2009 Investments in Cleantech Fall 50% to \$2.6 Billion as Investors Shift Focus to Energy Efficiency (Feb. 8, 2010), <http://www.ey.com/US/en/Newsroom/News-releases/Venture-capital-2009-investments-in-cleantech-fall-50-percent-to-2-billion-dollars-as-investors-shift-focus-to-energy-efficiency>.

ing requirements and potentially faster commercialization,” thus “energy efficiency is in the sweet spot of many venture capital investors.”<sup>247</sup> As a result, there was eleven percent growth in the number of venture capital deals for energy efficiency in 2009, for a total of \$593.3 million.<sup>248</sup> This apparent interest in energy efficiency and the availability of venture capital funds should increase the likelihood that third-party financing of utility on-bill recovery programs can be implemented more broadly.

#### IV. Conclusion

New York State has embarked on an ambitious clean energy agenda, with its adoption of a “15 by 15” goal to reduce electricity end-use in 2015 by fifteen percent below forecasted levels through energy efficiency.<sup>249</sup> Achieving this policy goal will require “the reduction of nearly 27 million megawatt hours . . . through energy efficiency programs.”<sup>250</sup> New York’s more recent decision in August 2009 to adopt an “80 by 50” goal to achieve an eighty percent reduction in GHG emissions from 1990 levels by 2050 provides additional stimulus for investing in energy efficiency.<sup>251</sup> The most cost-effective means of achieving these ambitious GHG emission reductions goals is through investing in energy efficiency measures.<sup>252</sup>

The availability of two innovative financing mechanisms—PACE bonds and utility on-bill recovery programs—in New York should assist in achieving these objectives, assuming the current barriers to implementation of PACE in New York and throughout the country can be removed. These creative approaches provide a means of financing the initial capital costs of investments in energy efficiency improvements in a manner that addresses—and should significantly reduce—existing barriers to these investments. First, both mechanisms allow the financing costs to be spread over a period that matches the useful lives of the underlying energy efficiency investments.<sup>253</sup> With a longer repayment period, the benefits produced by the installed energy efficiency measures will more than offset the periodic payment obligation on the initial investment, thereby producing immediate cash flow savings for the property owner or utility customer.

Second, both mechanisms address the barrier arising from the mismatch between energy efficiency measures with a long useful life and the length of time the current property owner or occupant is expected to remain in the premises. Property owners and utility customers are understandably reluctant to invest in energy efficiency measures that produce benefits

outlasting the term of their occupancy. By having the repayment obligation “run with the property” in the case of PACE financing, and “run with the meter” in the case of on-bill recovery, these approaches allow any remaining repayment obligation to be automatically transferred to a subsequent property owner or occupant.<sup>254</sup> This achieves the important objective of matching the payment of the liability—the repayment obligation—with the benefits accruing to a subsequent property owner or occupant, who captures continued energy efficiency savings produced during the remaining useful life of the energy efficiency measure.

Third, both mechanisms are expected to improve access to capital for borrowers who may otherwise be unable to access the necessary funds to invest in energy efficiency. They are expected to do so by replacing traditional standards of creditworthiness, such as a general credit history, with borrowers’ payment histories on a specific subset of relevant debt or payment obligations. In the case of PACE financing, the *White House Policy Framework* recommends that eligibility be determined by payment history with respect to property taxes and mortgage debt, rather than an individual’s general credit history.<sup>255</sup> In the case of on-bill recovery, the eligibility would be determined on the basis of the customers’ performance as utility customers, rather than performance as debtors on all obligations.<sup>256</sup> These eligibility screening mechanisms should enable property owners and utility customers with otherwise unacceptable credit ratings to remain eligible for participation in the program.<sup>257</sup>

Fourth, both mechanisms are expected to result in more favorable lending terms than borrowers would otherwise be able to achieve on their own. With PACE financing, there are several risk-reducing program parameters: (1) the senior lien status of property tax assessments (a characteristic currently at the center of the controversy in the federal housing agency determinations that have crippled implementation of PACE); (2) the very high rate of property tax payments in good standing; (3) the likely positive impact on property value resulting from energy efficiency investments; (4) the positive cash flow expected to be produced by energy efficiency investments; and (5) the limitation on the amount of the lien as a proportion of the property’s value (e.g., ten percent under New York’s statute).<sup>258</sup> These program characteristics should result in very favorable financing terms for issuances of PACE bonds. In the case of on-bill recovery programs, the Peregrine Model would follow a “pooled” approach that underwrites the program participants as a whole rather than on the basis of an individual participant’s risk profile.<sup>259</sup> This pooled approach, when coupled with the priority that utility customers place on prompt payment of their utility bills—which results in less repayment risk of the energy efficiency charge portion of the bill—are expected to result in favorable

247. *Id.*

248. *Id.*

249. See Order Instituting EEPS Proceeding, *supra* note 163, at 2.

250. See STATE ENERGY PLANNING BD., 2009 NEW YORK STATE ENERGY PLAN, VOLUME I, at 6 (2009), available at <http://www.nysenergyplan.com/stateenergyplan.html>.

251. Establishing a Goal to Reduce Greenhouse Gas Emissions Eighty Percent by the Year 2050 and Preparing a Climate Action Plan, N.Y. Exec. Order No. 24 § 1 (Aug. 6, 2009).

252. See MCKINSEY GHG STUDY, *supra* note 6, at ix, xiv.

253. N.Y. GEN. MUN. LAW § 119-gg(5) (McKinney 2010); see Order Establishing EEPS, *supra* note 165, at 60.

254. PAY-AS-YOU-SAVE REPORT, *supra* note 154, at 8; Final Report, *supra* note 179, at 24.

255. WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 7.

256. Final Report, *supra* note 179, at 20.

257. *Id.* at 16, 21.

258. See WHITE HOUSE POLICY FRAMEWORK, *supra* note 17, at 1–3.

259. Final Report, *supra* note 179, at 20.

financing terms (e.g., interest rates of 5.5% to 8.5%, which are comparable to the financing costs associated with home equity loans).<sup>260</sup>

Adoption of these programs in New York is expected to produce other benefits in the form of economic development and jobs, as well as reduced GHG emissions. Increased demand for energy efficiency measures is expected to create nearly 50,000 jobs in New York State alone.<sup>261</sup> Analysts have predicted that there could be as much as \$1 trillion worth of energy improvements to be performed nationwide, which could lead to vast job creation and economic stimulus, both of which are critical to the economic recovery.<sup>262</sup> Given the enormous amount of existing infrastructure in New York, as well as historically high energy prices, the State represents an ideal testing ground for the PACE model and utility on-bill recovery programs.

With respect to energy savings and reductions in GHG emissions, a typical retrofit package in an individual home can reduce GHG emissions by sixty to one hundred tons over its useful life.<sup>263</sup> According to the *White House Policy Framework*, if fifteen percent of residential property owners in the United States took advantage of PACE-type mechanisms for financing of clean energy measures, it would contribute four percent of the necessary GHG emissions reductions to achieve 1990 emissions levels by 2020.<sup>264</sup> Combining these energy efficiency investments with more widespread deployment of renewable energy would produce even greater GHG reductions: a \$520 billion investment in renewable energy and energy efficiency improvements to commercial and residential properties nationwide before 2020 would result in energy savings of over \$1 trillion and a gigaton of GHG emissions.<sup>265</sup>

There is no question that both programs face some challenges in their implementation and administration, as well as in achieving the scaling up that will be necessary to capture these levels of energy savings and GHG reductions.<sup>266</sup> Given the ambitious clean energy agenda adopted in New York State, and the likelihood that any federal climate legislation will adopt a similar objective of eighty percent or greater reduction in GHG emissions by 2050, it is essential that policymakers devote the necessary attention and resources to addressing and overcoming these administrative issues in

order to unleash the significant role that energy efficiency must play in meeting the urgent climate change challenge of the coming decades.

260. *Id.* at 19–21.

261. See Press Release, David A. Paterson, *supra* note 27.

262. See Israel, *supra* note 78. Claims about jobs related to installation of energy efficiency measures vary. Compare *PACE Finance Summary*, *supra* note 21 (estimating that “for every \$1 [million] spent on clean energy improvements, ten jobs are created”), with *PACE WHITE PAPER*, *supra* note 44, at 14 (stating that the Department of Commerce calculates that for every \$1 million spent on energy efficiency, only two jobs—defined as one person working full time for ten years—are created).

263. *PACE WHITE PAPER*, *supra* note 43, at 3.

264. *WHITE HOUSE POLICY FRAMEWORK*, *supra* note 17, at 3.

265. *McKINSEY EE STUDY*, *supra* note 9, at 1.

266. See generally Final Report, *supra* note 179 (providing a good overview of these potential hurdles, and describing certain legal and regulatory issues that must be addressed).