TABLE 3. "EFFICIENT USE OF ENERGY" ACCOMPLISHMENTS

EFFICIENT USE OF ENERGY *NYSERDA provides energy solutions that reduce the energy consumption and increase the energy efficiency of New York's residents and businesses.*						
Performance Measures	**Prior to 2009**	**CY 2009 Addition**	**CY 2010 Addition**	**Total at end of CY 2010**	**TARGET CY 2011 Addition**	**TARGET Total at end of CY 2011**
Electricity[26] (MWh) saved due to improved energy efficiency in New York's buildings and facilities.	3,173,615 MWh	644,301 MWh	857,624 MWh	4,675,541 MWh	759,009 MWh	5,434,550 MWh
Fossil Fuels (MMBtu) saved due to improved energy efficiency in New York's buildings and facilities.	6,014,970 MMBtu	244,330 MMBtu	1,581,020 MMBtu	7,840,320 MMBtu	2,270,599 MMBtu	10,110,919 MMBtu
Number of New York households served.[27]	79,500 Households	75,000 Households	167,000 Households	321,500 Households	133,500 Households	455,000 Households
Number of commercial and industrial customers served.	10,659 Customers	3,478 Customers	3,627 Customers	17,764 Customers	3,917 Customers	21,681 Customers
Energy Bill Savings[28] – 1) Annual direct energy bill savings realized by participating customers	$590 million	$90 million	$124 million	$804 million	**	Growth
2) Energy bill savings realized by participating customers per energy efficiency dollar spent by NYSERDA	$2.1 dollars saved per dollar spent	N/A	N/A	$2.5 dollars saved per dollar spent	**	**
Number of net additional jobs created as a co-benefit of NYSERDA's SBC-funded energy efficiency activities[29]	3,060 Jobs	480 Jobs	540 Jobs	4,080 Jobs	**	**
*** The measure will be monitored and reported but a 2011 target has not been set. NYSERDA has elected not to establish a target in cases where the measure is a function of a parameter that cannot be reliably predicted (e.g., energy costs) or in cases where the metric is new to NYSERDA.*						

[26] Electricity saved includes CHP generation from NYSERDA's existing facilities and technical assistance programs. Efforts are underway to segregate CHP energy impacts. Future reports will contain revised electricity savings values.

[27] Households served in 2010 and 2011 include over 165,000 households served through the ARRA appliance rebate program. This program will be completed in 2011.

[28] Energy bill savings reflects savings associated with System Benefits Charge funded New York Energy $mart and Energy Efficiency Portfolio standard programs only.

[29] Net additional jobs created are estimated using the Regional Economic Models, Inc. (REMI) Policy Insight™ model, and reflect the net macroeconomic impacts stimulated by the program activities. The estimated jobs impacts are largely driven by the additional purchasing power that results from the electricity and fossil fuel savings to customers, and also include the macroeconomic impacts of program expenditures, customer expenditures, lower sales by energy providers, and the opportunity costs of the program funds collected from ratepayers. The impacts of utility revenue decoupling are also accounted for across all years. The job figures represent the number of jobs that are estimated to exist as a result of cumulative program activity through the program year, relative to the number of jobs that would have existed in that year in the absence of the energy efficiency programs. The estimates of net jobs created are based on assumptions for average distributions of residential and commercial customer spending, and could be somewhat higher or lower in a given year depending on specific spending patterns, such as the proportions applied to pay off debt or to re-invest in a business.

Highlights of Additional "Efficient Use of Energy" Accomplishments:

- More than $3.7 Billion dollars in cumulative direct energy bill savings have been achieved through NYSERDA's SBC and EEPS programs.
- NYSERDA achieved 74 percent (1,627,900 MWh) of its SBC3 electricity savings goal (2,198,900 MWh) with an expenditure of 62 percent of the SBC3 budget.
- Through the GJGNY program, an innovative finance program was established allowing building owners to make energy saving improvements. Seed money consisting of $112 million acquired by auctioning carbon emission credits through RGGI and an $18.6 million grant award from the U.S. Department of Energy is being used to leverage private investment.
- NYSERDA's Energy Efficiency Services programs managed 3,100 commercial, industrial and institutional project applications in 2010, a 185 percent increase since 2008 and installed energy efficiency measures.
- NYSERDA's Residential Energy Services programs supported the construction of 2,439 New York ENERGY STAR® homes in 2010, representing approximately 24 percent of all new single-family homes built in SBC territory in 2010.
- As of December 2010, NYSERDA's multifamily programs have improved the energy efficiency of over 78,000 units yielding projected per unit tenant energy bill savings of approximately $200 annually.
- As a result of NYSERDA programs, more than 1,300 retailers now sell and promote ENERGY STAR qualified products, with 288 new retail partners added in 2010. By the end of 2010, ENERGY STAR qualified products at partner retail stores saw a 9 percent average increase in market share across all ENERGY STAR qualified products.

TABLE 4. "DIVERSE / RENEWABLE ENERGY" ACCOMPLISHMENTS

DIVERSE / RENEWABLE ENERGY *NYSERDA diversifies New York's portfolio of energy resources by increasing renewable and distributed generation resources and reducing petroleum use*						
Performance Measures	**Prior to 2009**	**CY 2009 Addition**	**CY 2010 Addition**	**Total at end of CY 2010**	**TARGET CY 2011 Addition**	**TARGET Total at end of CY 2011**
Electricity (MWh) produced from renewable sources– 1) Electricity Production (MWh) delivered to wholesale power market from incentivized installations	843,419 MWh	931,036 MWh	166,148 MWh	1,940,603 MWh	192,149 MWh	2,132,752 MWh
2) Electricity Production (MWh) from on-site installations	531,041 MWh	14,340 MWh	84,504 MWh	629,885 MWh	31,941 MWh	661,826 MWh
Number of operating renewable resource installations	1,261 installations	830 installations	1,348 installations	3,439 installations	1,328 installations	4,767 installations
Electricity (MWh) produced from combined heat and power (CHP) sources	132,991 MWh	237,825 MWh	179,125 MWh	549,941 MWh	47,460 MWh	597,401 MWh
Number of operating CHP installations	48 installations	13 installations	17 installations	78 installations	26 installations	104 installations
Petroleum Displacement (Thousands of gallons) in transportation sector	45,479 thousand gallons	6,704 thousand gallons	8,550 thousand gallons	60,733 thousand gallons	9,075 thousand gallons	69,808 thousand gallons

Highlights of Additional "Diverse / Renewable Energy" Accomplishments:

- Approximately 39 percent of the NYSERDA's RPS Main Tier and Customer-Sited Tier 2015 target is under contract with 29 percent of the total RPS budget.
- 39 large-scale generation project representing more than 1,546 MW of new renewable generation capacity have been selected to provide electricity to New York consumers. Of the 39 projects selected, 30 are now operating, and 9 are under construction.
- Awarded funding to support Phase 3 of Verdant Power's Roosevelt Island Tidal Energy (RITE) project. The RITE project will eventually include 30 marine and hydrokinetic (MHK) turbines in the east channel of New York City's East River and will demonstrate the commercial viability and widespread application potential of Verdant's Kinetic Hydropower System. Over 50 percent of the system components will be manufactured in New York along with final assembly of the system.
- NYSERDA's CHP Demonstration Program received a "State Stepping Forward Program Award" from the American Council for an Energy-Efficient Economy (ACEEE) in recognition of excellence in energy efficient program design and delivery, and for achieving substantial cost and energy savings for customers, expanding the market for energy efficiency technologies and guiding states towards an energy-efficient-economy.

- In December 2009, NYSERDA received $13.3 million in ARRA funds from the US Department of Energy's Clean Cities program to deploy alternative fuel vehicles (AFVs) and infrastructure across NYS. In 2010, NYSERDA contracted with over 40 public and private sub-recipients to purchase over 300 AFVs and nine infrastructure projects. By the end of 2010, more than half of the vehicles were on the road and four of the infrastructure projects had been completed. This included CNG vans and street sweepers, propane school buses and pick-up trucks, hybrid electric delivery trucks and dump trucks, and CNG, propane, and electric fueling stations.
- NYSERDA continued to provide incentives for early adoption of alternative fuel vehicle, emission reduction, fuel efficiency, alternative-fuel refueling infrastructure and transportation efficiency technologies. In 2010, NYSERDA support deployment of: 253 medium and heavy-duty alternative fueled vehicles; 37 public E85 fueling facilities; 200 diesel fired anti-idling coolant heaters on school buses; 20 private fleet vehicles, 5 ferry vessels and 347 school buses retrofitted with emission reduction technologies.

TABLE 5. "CLEAN ENERGY ECONOMY" ACCOMPLISHMENTS

CLEAN ENERGY ECONOMY *NYSERDA catalyzes economic growth by supporting technology and business innovation and by developing a skilled clean energy workforce*						
Performance Measures	**Prior to 2009**	**CY 2009 Addition**	**CY 2010 Addition**	**Total at end of CY 2010**	**TARGET CY 2011 Addition**	**TARGET Total at end of CY 2011**
Impacts of Product Development Activities– 1) Annual product sales	$1,079 million	$213 million	Data lags by one year	$1,292 million (at end CY 2009)	Growth	Growth
2) Number of products[30] in the market as a result of previous technology and business development investment	175 Products	6 Products	20 Products	201 Products	15 Products	216 Products
3) Change in GSP as a Result of R&D Product Development, expressed as a ratio of GSP impact to NYSERDA investment in R&D product development	new metric for 2011	N/A	N/A	5.2 Change in 2007 GSP (Analysis lags by 3 years)	N/A	**
4) Number of net additional jobs created as a result of the net macroeconomic activity stimulated by R&D product development activities[31]	630 Jobs	180 Jobs	180 Jobs	990 Jobs	**	**
5) Number of new clean energy products in development	new metric for 2011	new metric for 2011	new metric for 2011	new metric for 2011	25 Products	new metric for 2011
Funding leveraged[32] by NYSERDA's investment in business and technology product development	new metric for 2011	new metric for 2011	new metric for 2011	new metric for 2011	$50 million	new metric for 2011
Dollars invested by NYSERDA in business development activities	$59 million	$34 million	$38 million	$131 million	$36 million	$167 million

[30] The number of new products reported for 2009 and 2010 and the 2011 target are from NYSERDA's incubator programs only. Efforts are underway to collect new product data from other program efforts and will be incorporated in future reports.

[31] Net additional jobs created are estimated using the Regional Economic Models, Inc. (REMI) Policy InsightTM model. The estimated jobs impacts for R&D Product Development are largely driven by the investment in New York-based businesses and the sales revenue from new products, while also reflecting the opportunity costs of the program funds collected from ratepayers. The job figures represent the number of jobs that are estimated to exist as a result of cumulative program activity through the program year, relative to the number of jobs that would have existed in that year in the absence of the product development activities.

[32] Leveraged funding includes co-funding and a subsequent follow-on private funding. Data collection for follow-on private funding is an ongoing effort. The reported values represent and incomplete data set that will be supplemented in future years.

CLEAN ENERGY ECONOMY *NYSERDA catalyzes economic growth by supporting technology and business innovation and by developing a skilled clean energy workforce*						
Performance Measures	**Prior to 2009**	**CY 2009 Addition**	**CY 2010 Addition**	**Total at end of CY 2010**	**TARGET CY 2011 Addition**	**TARGET Total at end of CY 2011**
Number of clean energy businesses receiving financial support[33]	331 businesses	170 businesses	180 businesses	Not additive (some businesses are assisted for multiple years)	180 businesses	Not additive (some businesses are assisted for multiple years)
Number of patents, UL Listing certifications, license agreements, copyrights and other knowledge certifications	new metric for 2011	new metric for 2011	new metric for 2011	new metric for 2011	**	**
Number of workers trained in clean energy sectors [34]	10,960 trainees	6,586 trainees	6,144 trainees	23,690 trainees	7,150 trainees	30,840 trainees

** *The measure will be monitored and reported but a 2011 target has not been set. NYSERDA has elected not to establish a target in cases where the measure is a function of a parameter that cannot be reliably predicted (e.g., energy costs) or in cases where the metric is new to NYSERDA.*

Highlights of Additional "Clean Energy Economy" Accomplishments

- Through the Clean Energy Technology Business Incubator Program, NYSERDA supports six incubators across NYS. As of the end of 2010, the program had been active for 18 months and had assisted client companies in raising $16,465,000 in private capital; created 217 jobs at client companies within the incubators; developed and refined 26 new clean energy products; and assisted client companies in attracting $11,028,000 in federal funding.
- NYSERDA has completed the contracting process in support of four Energy Frontier Research Centers across NYS. NYSERDA provided letters of support, pledging $250,000, to each of the New York applicants to the DOE funded program. Four of the New York entities received a DOE award resulting in a combined total of $73,000,000 in federal funds to conduct fundamental research in new energy technologies.
- Through its Clean Energy Technology Manufacturing program, NYSERDA is supporting ten projects manufacturing products ranging from energy storage devices, photovoltaic modules and efficient lighting fixtures. The leverage ratio for the capital investment in the program is 8.4:1.
- NYS received approximately $261 million in federal ARRA funding for smart grid investments due in part to the development of NYSERDA's Power Delivery research program as well as the formation of the NYS Smart Grid Consortium. The NYS Smart Grid Consortium, of which NYSERDA is a

[33] Incubator sites are currently fully occupied and funding levels are flat so growth in the number of clean energy companies assisted in 2011 is not anticipated.

[34] Number of workers trained is a count of the occupied seats at training sessions. A worker that attends more than one training session will be counted more than once.

member, completed a comprehensive smart grid roadmap for New York that analyzed the relative costs, benefits and priorities of various smart grid technologies, business models, and policies that should be considered over the next 10-15 years.

- Supported the nation's first flywheel energy storage and regulations facility (20 MW) in Stephentown, NY and supported the site study and demonstration project, with NYSEG, of a 150 MW, 10 Hr Compressed Air Energy Storage (CAES) plant near Watkins Glen, NY.
- NYSERDA continued to develop STEP, a 280 acre knowledge community that currently houses 12 clean energy and high tech tenant companies with over 300 employees. STEP employment numbers are expected to increase as NYSERDA constructs new buildings and attracts additional clean tech companies to the Park.
- Continued to support NY-BEST, an industry-driven consortium that is helping to position New York as a global leader in energy storage technology for heavy-duty transportation, electric grid, and other applications. NY-BEST research and development awards supported 18 projects comprising $8 million in NYSERDA funds and $7 million in cost share.
- NYSERDA's training network has expanded to over 40 training entities delivering training in energy efficiency and building science, solar electric and thermal, small and large wind, geothermal, fuel cells, and anaerobic digester training.

TABLE 6. "A CLEANER ENVIRONMENT" ACCOMPLISHMENTS

A CLEANER ENVIRONMENT *NYSERDA reduces the environmental impact of energy production and use.*						
Performance Measures	**Prior to 2009**	**CY 2009 Addition**	**CY 2010 Addition**	**Total at end of CY 2010**	**TARGET CY 2011 Addition**	**TARGET Total at end of CY 2011**
CO_2 equivalent emission reductions due to NYSERDA's energy efficiency, renewable and diverse energy programs (annual tons)[35]	2,240,000 annual tons	679,000 annual tons	563,000 annual tons	3,482,000 annual tons	541,000 annual tons	4,023,000 annual tons
NO_x emission reductions due to NYSERDA's energy efficiency, renewable and diverse energy programs (annual tons)[35]	2,160 annual tons	680 annual tons	550 annual tons	3,380 annual tons	520 annual tons	3,900 annual tons
SO_2 emission reductions due to NYSERDA's energy efficiency, renewable and diverse energy programs (annual tons)[35]	4,170 annual tons	1,630 annual tons	1,150 annual tons	6,940 annual tons	920 annual tons	7,860 annual tons
Energy-related environmental policies informed by NYSERDA reports / studies	new metric for 2011	new metric for 2011	new metric for 2011	new metric for 2011	List will be maintained	List will be maintained

Highlights of Additional "A Cleaner Environment" Accomplishments

- Supported the development of NYS's Interim Climate Action Plan, including providing an updated greenhouse gas inventory, greenhouse gas abatement cost curves, technical data for greenhouse gas mitigation options, risk-based climate information, and assessments of potential climate change vulnerabilities and adaptation strategies.
- Since 1980, NYSERDA has collaborated with the Brookhaven National Laboratory, equipment manufacturers and fuel oil distributors to improve fuel oil combustion efficiency and validate cleaner fuel oil formulations including low-sulfur and bio-heat blends. The cumulative impact of this effort, according a Federal study, has resulted in savings of over $5 billion in fuel oil costs to New York consumers and avoided over 32 million metric tons of CO_2 emissions.
- Continued to support air quality monitoring of atmospheric pollutants that DEC depends on for air-quality planning. The monitoring is particularly relevant in the context of anticipated 2011 changes to ozone and fine particle National Ambient Air Quality Standards (NAAQS).
- Supported the installation of the first made-in-NY high-efficiency pellet boiler integrated with a solar-thermal how water system in Tupper, NY. An evaluation of the thermal efficiency and emissions on

[35] These emission reductions are associated with electric and fossil fuel energy efficiency measure savings and renewable and CHP generation.

the unit served as a basis for NYSERDA's comment to EPA on the Area Source Boiler Rule. NYSERDA is also developing technical information on residential wood boiler performance to support EPA's 2011 updates to the New Source Performance Standard for wood boilers.

- Completion of a Final EIS on West Valley Demonstration Project decommissioning and the removal or management of the remaining facilities at the Western New York Nuclear Service Center.
- Approval by the U.S. District Court of a Consent Decree that settles litigation filed by New York State in 2006 against DOE and the federal government in regard to cost responsibilities at the Western New York Nuclear Service Center.
- NYSERDA's extensive maintenance and monitoring programs continue to keep the radioactive waste safely contained at the Western New York Nuclear Service Center, protecting public health and the environment.

TABLE 7. "SATISFIED CUSTOMERS" ACCOMPLISHMENTS

SATISFIED CUSTOMERS *NYSERDA is responsive to customer needs–delivering accurate and timely information, services and programs*				
Performance Measures	**Prior to 2009**	**CY 2009**	**CY 2010**	**CY 2011 Target**
Contract processing time–Median time to process (weeks): 1) Contracts Awarded from Solicitations;	new metric for 2011	new metric for 2011	31.5 weeks	28.3 weeks
2) Open Enrollment Incentives;			14.6 weeks	13.1 weeks
3) Direct Contracts			7.0 weeks	6.3 weeks
4) Modifications / Task Orders			3.3 weeks	3.0 weeks
Invoice payment– 1) Number of invoices paid within 30 days	new metric for 2011	new metric for 2011	42,356 invoices	**
2) Percent of payments made within 30 days	new metric for 2011	new metric for 2011	99.98%	100%
** *The measure will be monitored and reported but a 2011 target has not been set. NYSERDA has elected not to establish a target in cases where the measure is a function of a parameter that cannot be reliably predicted (e.g., energy costs) or in cases where the metric is new to NYSERDA.*				

Highlights of Additional "Satisfied Customers" Accomplishments

- This is a new metric established in 2011. Additional highlights, beyond the quantitative targets above, may be reported in subsequent annual reports.