SBC Technology and Market Development Program Portfolio

Initial Proposal (January, 2011)

The SBC Technology and Market Development (TMD) Program will advance and prove-out new and emerging technologies and practices and pave the way for the next generation of technologies and program delivery strategies that will help New York achieve its energy efficiency and renewable energy goals, while enhancing system reliability.

The TMD program will build on the proven and highly successful track record of the SBC program. It is proposed that the TMD efforts be focused in three major categories: Power Supply & Delivery Initiatives; Residential, Commercial, & Industrial (RCI) Initiatives; and Clean Energy Infrastructure Initiatives. Proposed initiatives and approximate funding levels by Tier are described below.

Category	Initiative	Description	Approximate Annual Funding ($M)[1P]
Power Supply & Delivery Initiatives	**Smart Grid & Electric Vehicle Infrastructure**	Support development and demonstration of innovative technologies, new business models, and policy studies for transmission and distribution level initiatives that improve performance of the electric power delivery system. Implement targeted projects with statewide benefit; share "lessons learned;" coordinate with electric utilities to accelerate technology integration/adoption; and maximize federal and private funding resources. Target activities to effectively prepare for the integration and gradual increase in the market penetration of electric vehicles.	Tier I $10m-$15m
	Clean Power	Support technology development, demonstration and targeted early deployment of innovative, environmentally preferred clean energy power technologies including offshore wind, tidal/current energy, advanced solar PV materials/components, advanced airfoil technologies, value-added distributed generation, etc. Promote industry and academic partnerships and business development to increase the pace of technology commercialization. Develop and apply investigative processes (*e.g.,* modeling, forecasting, impact analyses) to build a well-defined inventory of sites, fuel/resource supplies, and project development opportunities. Support a focused initiative in offshore wind prospecting, siting, and statewide collaboration.	Tier I $10m-15m

Category	Initiative	Description	Approximate Annual Funding ($M)
Residential, Commercial, & Industrial (RCI) Initiatives	**Advanced Building Technologies**	Develop, demonstrate, and pilot advanced technologies, strategies, and business models that support an increased market share of high-performance buildings. Support large-scale, multi-site early deployment pilots that can expose engineers, architects and service providers to new technology - thereby accelerating market acceptance and commercial deployment of new and improved technologies and strategies. Fill the pipeline with innovative energy efficiency strategies and technologies that can be delivered more broadly through programs like EEPS.	Tier I $10m-$15m
	Industrial Process Innovation & IT Productivity	Develop and demonstrate the value of emerging industrial manufacturing product and process technologies that lower the energy intensity of New York industries. Develop and demonstrate cutting-edge technologies and techniques that achieve greater energy efficiency in the information technology (IT) sector. Demonstrations will be designed to show the targeted business sectors that the energy saving technologies can be incorporated without negative effect on their core business – thereby reducing their perception of risk.	Tier II $5m - $9m
	Whole Building Low-Income Initiative	Provide critical bridge funding for New York's low-income households -- where other funding sources are not available -- while NYSERDA explores partnerships and cooperative strategies with the oil and propane industries to share in the financial support for whole-house energy efficiency programs.	Tier III $2m-$4m
	Advanced Energy Codes & Standards	Provides training to the building design and construction community, as well as, on-site assistance to local building code officers. The program would supplement and not duplicate Department of State responsibilities or services and will strive to increase Energy Code compliance to 90% in residential and commercial buildings. The program will advance standards for additional equipment categories not covered by Federal standards to capture savings in the New York market and will develop a stretch energy code (such as in NYC) that is 20% - 30% more efficient than the current energy code that could be voluntarily adopted by communities.	Tier III $2m-$4m

Category	Program Name	Program Description	Approximate Annual Funding ($ M)
Clean Energy Infrastructure Initiatives	**Market Development**	Conduct strategic market characterization and analysis for specific market sectors / technologies to obtain critical early-stage information and insights to guide future investment decisions. Identify market and institutional barriers to technology and product adoption that need to be overcome to achieve broader participation in programs, further advance the reach of EEPS, and achieve other program public policy goals. Build supply, demand and market infrastructure for emerging and underutilized technologies and practices. Develop the supply infrastructure, including product distribution and sales, training and certifications and service delivery. Educate and inform market stakeholders and consumers about new technologies and practices. Pilot novel behavioral, financing, marketing, and outreach approaches. Support workforce training and certification in the installation and maintenance of emerging technologies to support successful market entry and acceptance.	Tier I $10m-$15m
	Clean Energy Business Development	Support clean energy development and manufacturing from early-stage seed funding to readiness for commercial introduction, focusing on the business development component of successful product commercialization. The program is designed as a complement to other SBC advanced building, clean power and smart grid technology programs, with the ultimate goal of creating clean energy businesses in New York State and accelerating commercial introduction of new technologies in New York State for wide-scale market deployment . The program will identify leveraging opportunities with private debt and equity capital, public-private partnership.	Tier II $5m-$9m
	Environmental Monitoring, Evaluation & Protection	Support policy-relevant research to better understand the environmental impact of energy options. Establish a comprehensive life-cycle assessment for all clean power, smart grid, and advanced building products.	Tier III $2m-$4m

(1) SBC3 Annual Funding Benchmark – Smart Grid & EV ($4M); Clean Power ($16M); Advanced Buildings ($4M); Industrial Process & IT ($3M); Whole Building Low-Income ($33M); Energy Code ($0); Market Development ($17); Clean Energy Business Development ($10); Market Research & Analysis ($0); Environmental Monitoring, Evaluation & Protection ($3.5)