

Shaping the Future of Energy

2014 DRAFT

New York State
Energy Plan

January 7, 2014



Overview

- Articulates the vision for the energy system in New York, 20 to 25 years forward
- Describes current context of the energy system
- Outlines strategies to move NY toward its vision
 - Long-term policy goals
 - Near-term action items
 - Meaningful metrics



Vision

- Plan envisions a flexible and clean energy system that empowers residential customers, businesses, and communities to receive the reliability and affordability they value
- Initiatives to achieve vision focus on five areas:
 - Improving energy affordability
 - Unleashing the power of private sector energy financing
 - Providing a more resilient and flexible power grid
 - Giving customers more control over their energy use
 - Aligning energy innovation with market demand



Current Context

- New York Energy Highway
- ReCharge NY
- Cleaner Greener Communities
- BuildSmart NY
- Charge NY
- Regional Greenhouse Gas Initiative
- Energy Efficiency Portfolio Standard
- ReBuild NY
- Renewable Portfolio Standard
- NY-Sun Initiative



Long-Term Policy Goals

1. Improved Energy Affordability
 - Residential electric bills will be kept below the national average as a percentage of median household income
2. Cleaner Environment
 - Reduce the intensity of carbon emissions from the energy sector by 50% by 2030
3. Robust Economic Activity
 - Increase the total investment in the clean energy economy
4. Increased System Efficiency
 - Increase the utilization of existing electric infrastructure



Energy Affordability Initiatives

1. **Realign energy efficiency policies** to work with and through markets in order to accelerate the pace of energy efficiency deployment while fostering continued economic growth in New York State
2. **Enable and facilitate new energy business models** for utilities, energy service companies, and customers to be compensated for activities that contribute to grid efficiency
3. **Establish and implement building codes and standards** that will help support energy efficiency and clean energy



Energy Financing Initiatives

4. **Establish a \$1 billion New York Green Bank** to unlock and mobilize private sector capital for greater investment in New York's clean energy economy
5. **Coordinate renewable energy policies** to strategically harness the many resources that the State can provide to solar, wind (offshore and land-based), bioenergy, geothermal, hydrokinetic, storage, and other power supply options



Grid Resiliency Initiatives

6. **Update and modernize electricity and gas delivery systems** to replace aging infrastructure and ensure service quality and reliability with a more integrated and distributed energy network
7. **Support community-based energy planning** and facilitate public-private partnerships to develop smart, integrated energy networks and support regional economic development



Grid Resiliency Initiatives (cont'd)

8. **Accelerate securing of critical infrastructure** to ensure the safety, security, and reliability of an increasingly complex and interconnected energy system, including transportation, liquid fuels, electricity, and natural gas infrastructure
9. **Reduce reliance on petroleum products** for heating buildings by supporting the use of clean alternatives to heating oil and expanding access to natural gas in the near term while pursuing strategies to reduce natural gas leakage.



Customer Control Initiatives

10. Give customers more choice and control of their energy usage to determine what services they value by cultivating a more competitive market around home energy solutions
11. Provide improved information and access to energy-related data to support customers' ability to make educated decisions about clean and efficient energy investments



Customer Control Initiatives (cont'd)

12. **Increase transportation alternatives and vehicle diversity** to harness the benefits of decreased dependence on oil and a cleaner, more connected, and more flexible transportation sector
13. **Bring innovative information technology to transportation system users** to support more efficient and safe travel



Energy Innovation Initiatives

14. **Encourage clean technology innovation and commercialization** to maximize the economic impacts of a vibrant private sector in New York
15. **Foster a clean energy workforce** targeting participants across all aspects of the energy sector



Meaningful Metrics: Energy

- Keep New York residential customer electric bills as a percentage of household income at or below the national average
- Reduce the percentage of household income devoted to energy bills for low-income New Yorkers
- Improve competitiveness of industrial customer electric rates
- Decrease number of customers relying on oil or propane for heat
- Increase energy efficiency resource deployment
- Decrease electric system peak demand
- Improve utilization of existing electric infrastructure



Meaningful Metrics: Economic

- Increase renewable energy deployment
- Increase cost effective distributed energy deployment
- Increase leverage ratio of private capital to public investment
- Increase New York energy dollars retained in the State
- Decrease energy use per unit of gross state product
- Increase clean energy business activity
- Increase net job impacts of energy initiatives and clean energy program portfolios



Meaningful Metrics: Resiliency

- Improve electric system's ability to withstand extreme weather events
- Increase the number of customers and communities supported through distributed resources that can be isolated from the electric grid during emergency events
- Decrease outage recovery duration following major events
- Increase power quality for system sensitive customers
- Increase load control penetration by customer sector
- Reduce the duration and frequency of outages during storm events



Meaningful Metrics: Environmental

- Decrease greenhouse gas emissions in New York
- Reduce the carbon intensity of our energy system
- Reduce reliance on petroleum in all sectors
- Reduce health and economic impacts associated with air pollution from fossil fuel use in the energy sector
- Increase number of alternative fueled vehicles registered in New York to 1 million vehicles by 2025
- Increase number of alternative fueling and charging stations
- Increase fuel diversity of electricity and transportation systems
- Increase the average fuel economy of passenger motor vehicles registered in New York



Process

- Draft Plan issued to public following Board approval
- 60-day public comment period
 - Written comments accepted through website: energyplan.ny.gov
 - 6 public comment hearings (3 “upstate”, 3 “downstate”)
- Public comments considered in preparation of Final Plan
- Final Plan presented to Board for adoption (target: Spring 2014)



Board Discussion

Questions and comments



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