

Clean Energy Standard

New York's new "clean" energy policy and what is at stake.

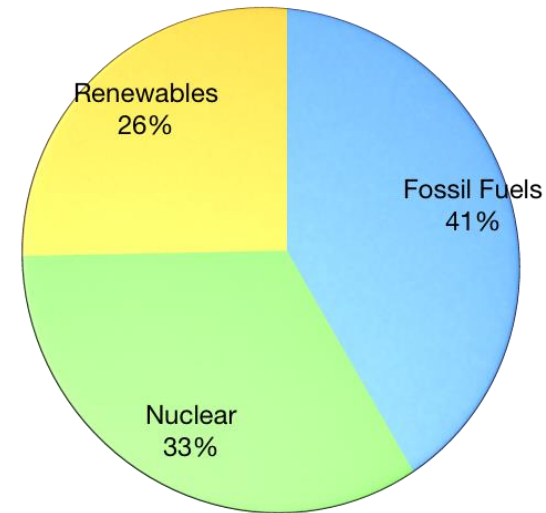


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What is the Clean Energy Standard?

- ▶ A proposed policy to mandate that utilities will buy 29% renewable electricity by 2020 and 50% renewable electricity by 2030.
- ▶ A proposed policy to mandate the utilities will buy 15% of their electricity from unprofitable nuclear plants by 2020 and to create ongoing subsidies for nuclear plants. (Other, profitable nuclear will likely stay online as well, so this is not a net decrease).



NY Electric Generation as of December, 2015

How did we get here?

- ▶ In 2014 at the NYS Energy Plan Hearings, hundreds turned out against dirty fuels & in favor of renewable energy
- ▶ In 2015, hundreds turned out again in favor of concrete renewable energy targets during the Reforming the Energy Vision (REV) hearings
- ▶ Now, in 2016, the Governor has proposed clean energy mandates for utilities, and it's our job to make sure they stick, and that only renewables get supported!



What's the process for finalizing the Clean Energy Standard?

- January - White Paper Released
- April - Cost-Benefit Analysis Released
- May - Public Hearings
- June - Public Comments Due 6/6
- June/July - Final Clean Energy Standard

Renewable targets and tiers

- ▶ Utilities and ESCOs will be required to buy certain percentages of the energy they sell from each of three tiers.



- ▶ Tier 1: New Renewables

- ▶ Increasing yearly targets for new renewable electricity
- ▶ Penalties for noncompliance which would go to fund renewable energy development & energy efficiency
- ▶ Still “backloaded” with many renewables coming online past 2023



- ▶ Tier 2: Existing Renewables

- ▶ Maintains support so existing renewables will stay online



- ▶ Tier 3: Unprofitable Nuclear...

Tier 1

<u>Year</u>	<u>GWh Target</u>	<u>Mandate as a % of Forecasted Load</u>
2017	1,536	0.9%
2018	2,446	1.5%
2019	3,465	2.1%
2020	5,465	3.4%

Tier 2A

<u>Year</u>	<u>GWh Target</u>	<u>Mandate as a % of Forecasted Load</u>
2017	1,931	1.2%
2018	2,472	1.5%
2019	3,198	2.0%
2020	3,198	2.0%

Tier 2B

<u>Year</u>	<u>GWh Target</u>	<u>Mandate as a % of Forecasted Load</u>
2017	15,330	9.5%
2018	15,374	9.6%
2019	15,423	9.7%
2020	15,423	9.7%

Nuclear targets and tier

- ▶ Four nuclear reactors in Upstate New York are unprofitable: FitzPatrick, Ginna, Nine Mile Point 1, and Nine Mile Point 2.
- ▶ The Governor has instructed the Public Service Commission to prevent them from closing “prematurely.”
- ▶ The Clean Energy Standard proposal contains a third tier: The Nuclear Tier.
- ▶ Utilities would be required to buy Nuclear Zero Emissions Credits (ZECs).

Tier 3

<u>Year</u>	<u>GWh Target</u>	<u>Mandate as a % of Forecasted Load</u>
2017	7,500	4.6%
2018	10,000	6.2%
2019	15,000	9.4%
2020	25,000	15.7%






(ZECs are increasing because the Commission predicts more and more reactors will become unprofitable and need bailouts.)

Why nuclear has no place in a “Clean” Energy Standard

- ▶ There are over 15,000 abandoned uranium mines in the US, mostly in indigenous communities.
- ▶ Approximately 25,000 pounds of mining waste (rock, mill tailings, and depleted uranium) are generated for each pound of nuclear fuel.
- ▶ The legal limit for radiation exposure is a dose that will cause 1 additional cancer fatality per 286 people exposed.
- ▶ Almost 75% of reactors in the U.S. have had radioactive tritium leak at some point.
- ▶ The US nuclear fleet generates approximately 2,000 metric tons of high-level radioactive waste annually.
- ▶ Most of the reactors in Upstate NY use once-through cooling systems. Each uses roughly 800 million gallons of water daily to cool the reactors and then dump it back into Lake Ontario, causing thermal and radioactive pollution and killing aquatic life.
- ▶ The Indian Point reactors on the Hudson River consume about 2-2.5 billion gallons per day, killing a billion fish and other organisms each year. Every 2 hours, the plant’s cooling system dumps as much heat as the Hiroshima bomb explosion into the river.



Clean Energy Standard Proposed Tiers and Resource Allocations

		Utility purchase requirements as percentage of power they supply customers		
		2017	2020	Notes
Clean Energy Standard supported resources	Tier 1 - New renewables 	1%	3%	Utilities to purchase increasing amounts of RECs from new renewables
	Tier 2 - Existing renewables 	11%	12%	Utilities to purchase a fairly steady amount of RECs from existing renewables
	Tier 3 - Unprofitable nuclear 	5%	16%	Utilities to purchase increasing number of ZECs from nuclear plants because of the number of unprofitable nuclear plants is expected to rise through 2020.
		Estimated percentages of state power supply implied by proposal		
Other electricity generators	State-owned hydro 	15%	14%	State-owned hydroelectricity facilities form a base of renewable energy supply for the state. This power is sold through the NY Power Authority.
	Fossil fuels and profitable nuclear 	68%	55%	Fossil fuels to decrease 2-3% as new renewables come on line. Meanwhile, half the nuclear reactors in this category will become unprofitable and move to Tier 3 for subsidies.

NOTE: Projections are through 2020 because the Department of Public Service Staff have only proposed specific targets through 2020. Targets for later years will be set at a later date.

What are the economic benefits of renewables?

- ▶ Average estimate for Tier 1 & Tier 2 is a net benefit of \$529 million through 2023
- ▶ Benefits include avoided greenhouse gases, but not economic development and jobs
- ▶ Some variance due to interest rates, cost of fossil fuels, federal tax credits etc.
- ▶ Bill impact of 1% on average residential utility



What are the costs of maintaining nuclear?

- ▶ FitzPatrick is losing at least \$60 million per year.
- ▶ Ginna is losing at least \$80 million per year.
- ▶ Nine Mile Point losses unknown.
- ▶ Nuclear costs have been rising about 5% per year. This isn't just about cheap gas.
- ▶ Staff Cost Report estimated the nuclear tier would cost \$59-\$658 million for the first 5 years.
- ▶ We estimate tier 3 will cost at least \$3.5 billion through 2030.

- ▶ Unlike with the Renewable Energy mandates, there is no cost cap proposed for the nuclear tier.



Nothing to see here...

What is not in the Clean Energy Standard?

- ▶ A commitment to offshore wind
- ▶ Energy efficiency mandates
- ▶ Energy affordability
- ▶ Local / in-state purchasing requirements
- ▶ Plan to include the Long Island Power Authority, the NY Power Authority, or other municipal utilities

How to influence the outcomes

- ▶ Submit comments
 - ▶ <http://allianceforagreenecconomy.org/ces> or <http://sc.org/ces>
 - ▶ Commit to gathering more comments through petitioning
- ▶ Attend a public hearing
 - ▶ Commit to phonebank or bring a friend!

Public hearing dates

Binghamton

Tuesday, May 10
Binghamton City Hall
2pm and 6pm

Buffalo

Wednesday, May 11
Town of Amherst
Harlem Road
Community Center
2pm and 6pm

Rochester

Thursday, May 12
Chili Town Hall
2pm and 6pm

Albany

Tuesday, May 17
Colonie Town Hall
Latham
2pm

Albany Law School
6pm

Plattsburgh

Wednesday, May 18
Plattsburgh Town Hall
2pm and 6pm

Oswego

Tuesday, May 24
Oswego City Hall
2pm and 6pm

Syracuse

Wednesday, May 25
Liverpool Public Library
2pm and 6pm

Kingston

Thursday, May 26
Kingston City Hall
2pm and 6pm

Manhattan

Tuesday, May 31
PSC Boardroom
2pm and 6pm

Long Island -- TBA

Talking Points

- ▶ Enforceability
- ▶ Nuclear energy is not clean (No nuclear tier)
- ▶ Commitment to offshore wind
- ▶ Energy efficiency mandates
- ▶ Power purchase agreements
- ▶ Affordability
- ▶ Local/in-state purchasing

Find out more

- ▶ Alliance for a Green Economy website - www.allianceforagreenconomy.org/ces
or reach out to Jessica Azulay, jessica@allianceforagreenconomy.org
- ▶ Sierra Club website - <http://sierraclub.org/coal/new-york>
or reach out to David Alicea, david.alicea@sierraclub.org 631-223-6330



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