September 2023

REC Policy for LL97

1. Context

Local Law 97 (LL97) authorizes the Department of Buildings (DOB) to allow building owners to meet their emissions limits by purchasing renewable energy certificates (RECs) that are associated with renewable energy resources located in or whose output directly sinks into New York City.[1] The use of RECs for LL97 compliance is restricted (by law[2] and as interpreted by rule[3]) to emissions attributed to consumption of utility-supplied electricity in a covered building. LL97 allows DOB to limit, by rule, the amount of a deduction attributable to the purchase of RECs.

2. Proposed REC Policy

In the proposed rules implementing LL97, DOB proposes to limit the use of RECs for LL97 compliance as follows: Where a building owner chooses to submit a decarbonization plan to receive penalty mitigation offered through good faith efforts (GFE), such building owner may not use RECs in the first compliance period (2024-2029). There is no other specific restriction in this rule regarding the use of RECS during this compliance period.

3. The availability or expected availability of RECs

In April 2022, the Public Service Commission (PSC) approved two Tier 4 REC projects that will meet the law's criteria: Champlain Hudson Power Express (CHPE) and Clean Path New York (CPNY), both of which will deliver renewable energy to NYC. Neither project will be online when LL97 compliance begins in 2024. Current estimates have Tier 4 RECs becoming available in 2026. The timely completion of these projects is a priority for the City and State to meet renewable electricity mandates in the Climate Leadership and Community Protection Act, reduce the greenhouse gas (GHG) emissions associated with electricity generation and usage in Zone J, and retire in-city fossil fuel power plants that are disproportionately located in environmental justice (EJ) neighborhoods.

a. The Cost of RECs vs. the Cost of the LL97 Penalty

When approval of the CHPE and CPNY contracts were sought in 2021, the projected levelized net cost (in real 2021 dollars) of Tier 4 RECs ranged from $23.36/MWh to $32.01/MWh.[4] There are several petitions pending before the PSC, including from CPNY and CHPE, seeking upward adjustments to the strike prices of Tier 1, Tier 4, and offshore wind RECs due to inflation, higher interest rates, and supply chain challenges. If the PSC approves adjustments for the CPNY and/or CHPE projects, the price of the RECs associated with the project(s) would increase. Separately, market conditions have changed since the above REC prices were developed, and the New York Independent System Operator, Inc. will be

[1] NYC Administrative Code § 28-320.6.1.
[2] Section 35 of Local Law 77 of 2023
[3] 1 RCNY 103-14(e)(1)(i)
[4] See PSC Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Petition Regarding Agreements for Procurement of Tier 4 Renewable Energy Certificates (filed November 30, 2021) at p. 26.

implementing capacity accreditation in 2024. These changes are likely to have additional upward effects on REC prices.

The cost of RECs must be less than or equal to the cost of an expected LL97 penalty for RECs to be an economically attractive option for LL97 compliance, when compared to paying penalties. RECs and the penalty schedule are in different units (RECs in $/MWh and penalties in $/tCO2e). By converting $/MWh to $/tCO2e using the emissions coefficient for utility electricity (tCO2e/MWh) provided under LL97, the highest economically viable price of RECs for LL97 compliance, compared to the maximum LL97 penalties, is **$268/tCO2e.** The following table provides a range of REC costs and provides a comparison to this penalty amount.

	1st compliance period		2nd compliance period
	2024-2025	2026-2029	2030-2034
GHG coefficient for utility electricity (tCO2e/MWh)	0.288962		0.145
Tier 4 REC Cost ($/MWh)	**Tier 4 REC Cost ($/tCO2e)**		
$20	-	$69	$138
$30	-	$104	$207
$40	-	$138	$276
$50	-	$173	$345
$60	-	$208	$414
$70	-	$242	$483
$80	-	$277	$552

While the cost of RECs is likely to change annually, the above analysis indicates that Tier 4 RECs are likely to be an economically attractive option for LL97 compliance from 2026 to 2029. For the 2030 to 2034 compliance period, the cost of RECs is likely to exceed the cost of maximum penalties.

b. The Cost of RECs vs. the Cost of Building Alterations

Most buildings that are projected to not meet the LL97 emissions limits for the 2024-2029 compliance period are estimated to be less than 45% over their emissions limits, and can likely engage in low-effort and low- or moderate-cost work as the most economically viable option for achieving compliance with the law, especially when coupled with the decarbonization plan GFE penalty mitigation option.[5]

[5] Costs of building alterations for the purposes of this analysis were derived from the following sources:

- Carbon Trading for New York City's Building Sector: Report of the Local Law 97 Carbon Trading Study Group to the New York City Mayor's Office of Climate & Sustainability
- Pathways to Carbon-Neutral NYC: MODERNIZE, REIMAGINE, REACH
- Local Law 97 Implementation Action Plan

RECs are likely to be an economically attractive option as compared to the cost of the total work needed to comply with the emissions limits for a small percentage[6] of buildings that are significantly over their 2024 emissions limits. An owner who chooses to purchase Tier 4 RECs for the 2024-2029 compliance period would be subject to penalties before RECs become available (2024-2025) and then purchase RECs when they become available (2026-2029). Because an owner cannot meet the LL97 emissions limits solely through the purchase of RECs, the owner may nevertheless remain subject to penalties. Further, because penalties do not excuse non-compliance, the cost of compliance would remain.

4. Environmental Justice Impacts

The building emissions reductions that will be achieved with the decarbonization plan pathway (as described below) are expected to result in significant emissions reductions in the first compliance period from otherwise noncompliant buildings. Building level emissions reductions will also reduce local criteria air pollutants. These improvements will be citywide and are particularly important for EJ communities that see disproportionate health impacts associated with poor air quality.

5. Other relevant factors

The decarbonization plan requires work at the building level during the first compliance period. The GFE option for decarbonization plans allows building owners to pay fewer or no penalties (in 2024 and 2025) by instead demonstrating long-term planning to reach carbon-neutrality by 2050, achieving on-site emissions reductions by 2026, and demonstrating progress towards 2030 compliance by 2028. DOB sees this option as an important driver of building emissions reduction mobilization.

6. Going forward

DOB is working to monitor New York's REC market and assess the availability of any RECs that meet the requirements of the law. The Department will revisit this policy as necessary to best achieve the goals of LL97 and associated air quality improvements.

[6] Approximately 2% of all buildings subject to LL97, based on internal DOB analysis of 2022 data.