

Standardizing Renewable Energy Property Tax Approaches in NYS

*Prepared for ACE NY and NYSEIA by
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EXECUTIVE SUMMARY



Key findings of the study

- The current lack of a standardized property taxation methodology in New York introduces uncertainty into renewable energy development, leading to project delays and attrition that impede New York's ability to successfully fulfill its clean energy goals, namely, 70% renewable electricity by 2030 (70 by 30) and 6 GW distributed solar by 2025.
- Standardization of property taxation assessment methodology holds promise for mitigating this barrier – increasing certainty, reducing project attrition, reducing development timelines, and increasing project development – without reducing expected property tax or payment in lieu of tax (PILOT) rates to taxing jurisdictions.
- Standardizing tax assessments could lead to approximately 3,500-6,100 MW (megawatts) *more capacity of renewable energy projects* on the grid by 2030, with approximately 1,150 MW of that total increase from distributed solar resources. This additional renewable energy will not only generate a healthier environment for all New Yorkers, but also will generate significantly increased economic benefits across all regions of New York State, as highlighted throughout this report.

Key findings of the study (cont'd)

If renewable energy tax assessment standardization is adopted...

- Local jurisdictions across New York State could receive **\$116 million to \$348 million more** in the net present value of PILOTs over project lifetimes (see slides 13-17).
- The State could generate **12,300 to 20,600 additional jobs** from increased and accelerated renewables deployment, resulting in an additional **\$2 billion in labor income** at the mid-range (see slides 18-19).
- New York Gross State Product could **increase by \$3.9 billion to \$6.5 billion** (see slide 20).
- Business sales across the State could **increase by \$6.9 billion to \$11.6 billion** (see slide 21).

**all values represented in 2021\$, for projects coming online 2022-2030*

Issues and risks with the status quo

- New York State's 70 by 30 goal, along with 6 GW of distributed solar by 2025, is lofty but achievable. These ambitions require addressing the known obstacles to successful renewable energy development.
- With the many concurrent processes required for the successful development of renewable energy projects, changes that are designed to accelerate the development of renewable energy may not have the intended effect without subsequent changes to concurrent processes – and as concurrent processes become more efficient, taxation policies have an increased likelihood of being the limiting factor in a project development timeline in the absence of supplemental changes (see slides 9-10).
- The current lack of standardization and predictability in tax assessment and PILOT methodology can severely threaten and disrupt project development (further discussion in Section 3.1.2 of full report). Lack of standardization can also:
 - Increase the risk and time expenditure for projects, resulting in significantly higher development costs and additional energy costs to consumers;
 - Limit what a developer is able to provide in more targeted Host Community Agreements;
 - Increase tensions between developers and community, and create jurisdictional conflicts and pressure between towns, schools, counties, and IDAs;
 - Place time/administrative burden on local staff for assessment, negotiation, and the potential for a large number of appeals and risk of legal cost from potential litigation;
 - Place political pressure on local politicians who bear the burden in justifying to constituents an assessment approach and PILOT amount.
- At the same time, taxation of renewable energy projects and the use of PILOTs creates an opportunity for host communities to attract projects that will create jobs, spur economic activity, and provide stable, long-term revenues to host communities.

Purpose of this study and methodology

Purpose:

The purpose of this study is to quantify the likely impacts of property tax assessment standardization on renewable energy deployment, and to estimate the property tax-based revenues to local jurisdictions and the overall economic impacts resulting from that deployment.

Methodology:

This analysis estimates the expected annual capacity of renewable energy projects deployed with and without property tax standardization. We then use the modeled deployment to estimate by region the total value of PILOTs to local taxing jurisdictions, and the total economic impacts resulting from the initial investment in the projects and ongoing operations and maintenance.

Comparing cases with and without policy reform

To quantify the impacts of a property tax standardization policy, we developed projections of renewable energy deployment under the status quo and under assumed policy reform, incorporating the following assumptions.

Status Quo Case:

- This case reflects the current state of affairs in which the variability of property tax policy across local jurisdictions, and the difficulty of negotiating a feasible PILOT, creates an obstacle to renewable energy development.
- Projects face extended development timelines and a material risk of increased project attrition due to PILOT negotiations, relative to the State's assumptions in setting large-scale renewable (LSR) procurement targets and NY-Sun solar incentives.
- Under this status quo, the pace of development falls short of meeting New York's 70 by 30 goal and 6 GW by 2025 distributed solar goal.

Tax Standardization Case:

- Adoption of property tax assessment standardization removes a major barrier to successful and timely PILOT negotiations across the State's local jurisdictions.
- Absent this barrier, renewable energy projects move forward at a pace and degree of success consistent with the State's LSR targets and NY-Sun expectations.
- In this case, New York achieves the 70 by 30 goal and 6 GW by 2025 distributed solar goal.

Modeling implications of developer experience to date

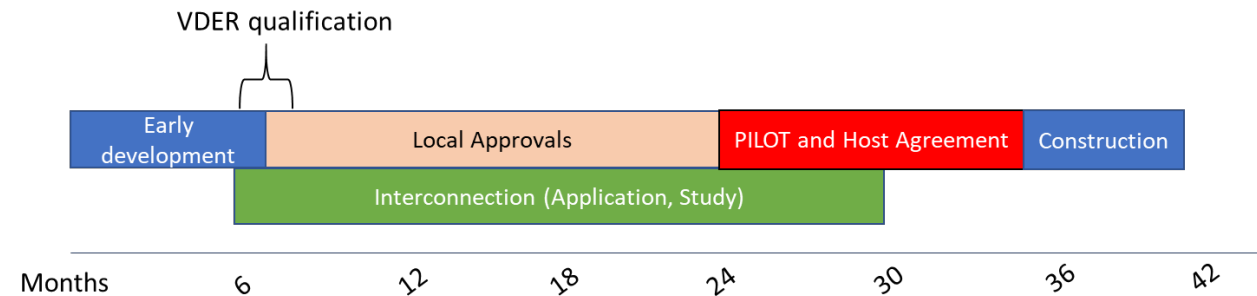
We surveyed developers to gather data points on PILOT values, and delay and attrition assumptions. We received feedback from ten developers and collected historical PILOT data on 89 distributed solar projects and 24 large-scale renewables projects.

- Distributed solar developers indicated that shortened PILOT negotiation timelines go hand-in-hand with being able to complete more MW of projects more expediently. On the LSR side, indications show that tax negotiations that extend beyond concurrent activities such as contracting, permitting, and interconnection can lead to increased project delay and potential attrition.
- PILOT values provided by developers vary materially in the base value of a per-MW annual payment, the duration of the PILOT, and the amount of escalation, if any, applied. We applied a conservative low/base/high range of PILOT payments to account for this variability. Total PILOT net present value (NPV) is based on the total payments that projects coming online between 2022-2030 make over their lifetime, evaluated across low, base, and high PILOT value assumptions by load zone or utility territory.
- For LSR projects, there is less uniformity in the development process, so we evaluated a range of attrition and delay inputs (low/base/high impact) to model a range of capacity deployment.
- We assumed a useful life of 35 years for solar (both distributed and LSR projects) and 30 years for wind. While these estimates are longer than offered incentive or contract durations, per our survey, they are consistent with values used by developers in their financial pro formas.
- As the purpose of the proposed policy change is not to reduce payments but to increase certainty, we held the value of PILOT payments constant between the Status Quo and Standardized Taxation cases.
- We assumed levelized \$/MW annual payments that increase by 2% annually over the entire useful project life, that are reflective of 2020 values, and would increase slightly on par with inflation over time.

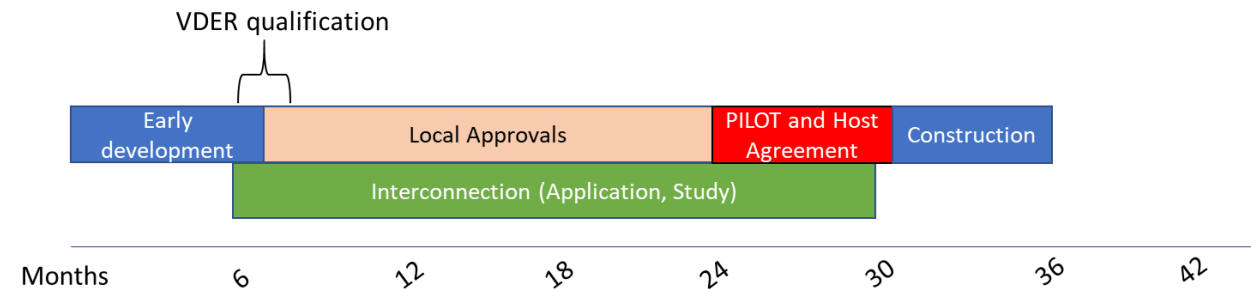
Illustrative timelines – distributed (DG) solar

Developer time, legal costs, and resources to negotiate PILOTs – especially with multiple taxing jurisdictions – is substantial. Standardizing tax payments could significantly reduce this expenditure of resources, which would allow developers to build more projects, faster.

Illustrative Distributed Solar Development Timeline, Status Quo



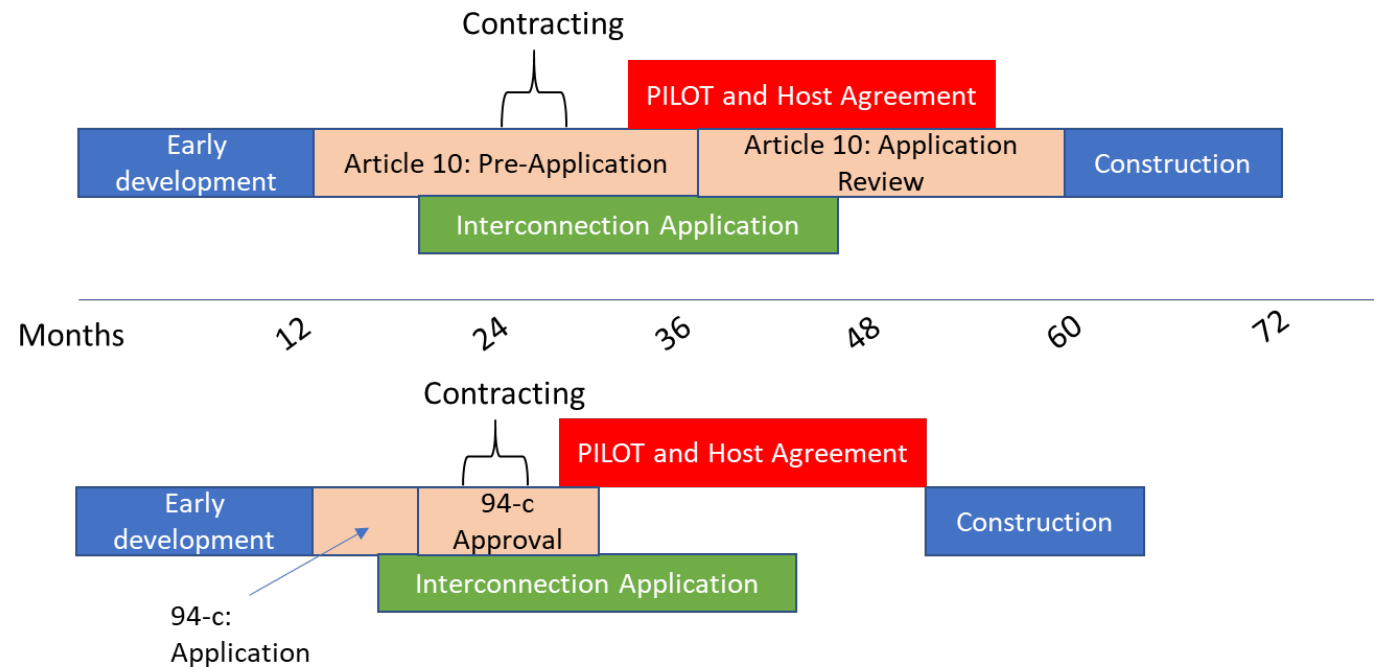
Illustrative Distributed Solar Development Timeline, Tax Standardization



Illustrative timelines – large-scale renewables (LSR)

PILOT negotiations cause a direct delay in project timelines when they are the activity “on the margin,” with negotiations ongoing beyond efforts on financing, contracting, permitting, and interconnecting. While the statutory timelines under the newly enacted 94-c permitting process are significantly shorter than historical experience under Article 10, in some situations the acceleration in permitting may be partially offset by a lag in PILOT negotiations.

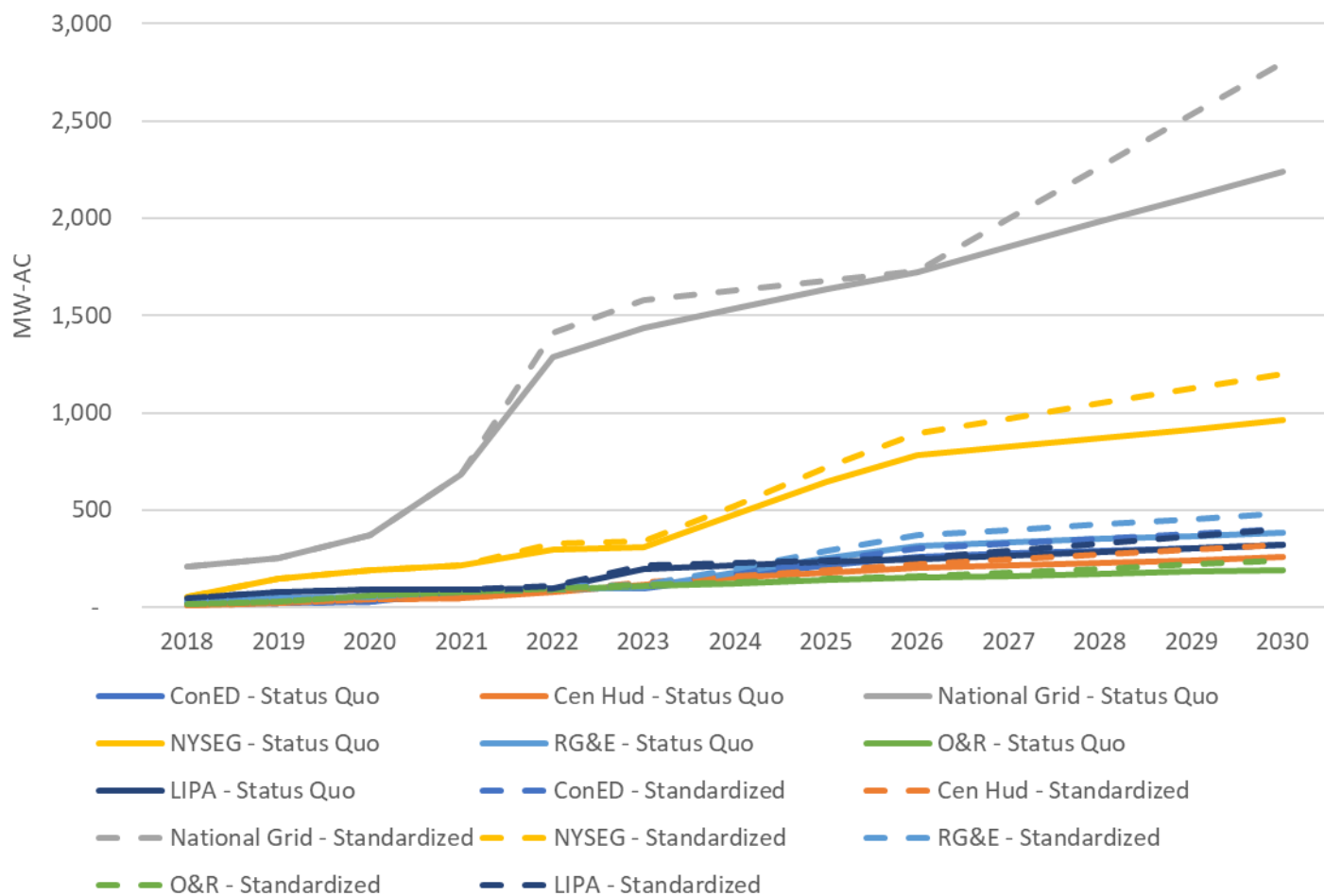
Illustrative Large Scale Renewables Timelines – Article 10 vs. 94-c, Status Quo



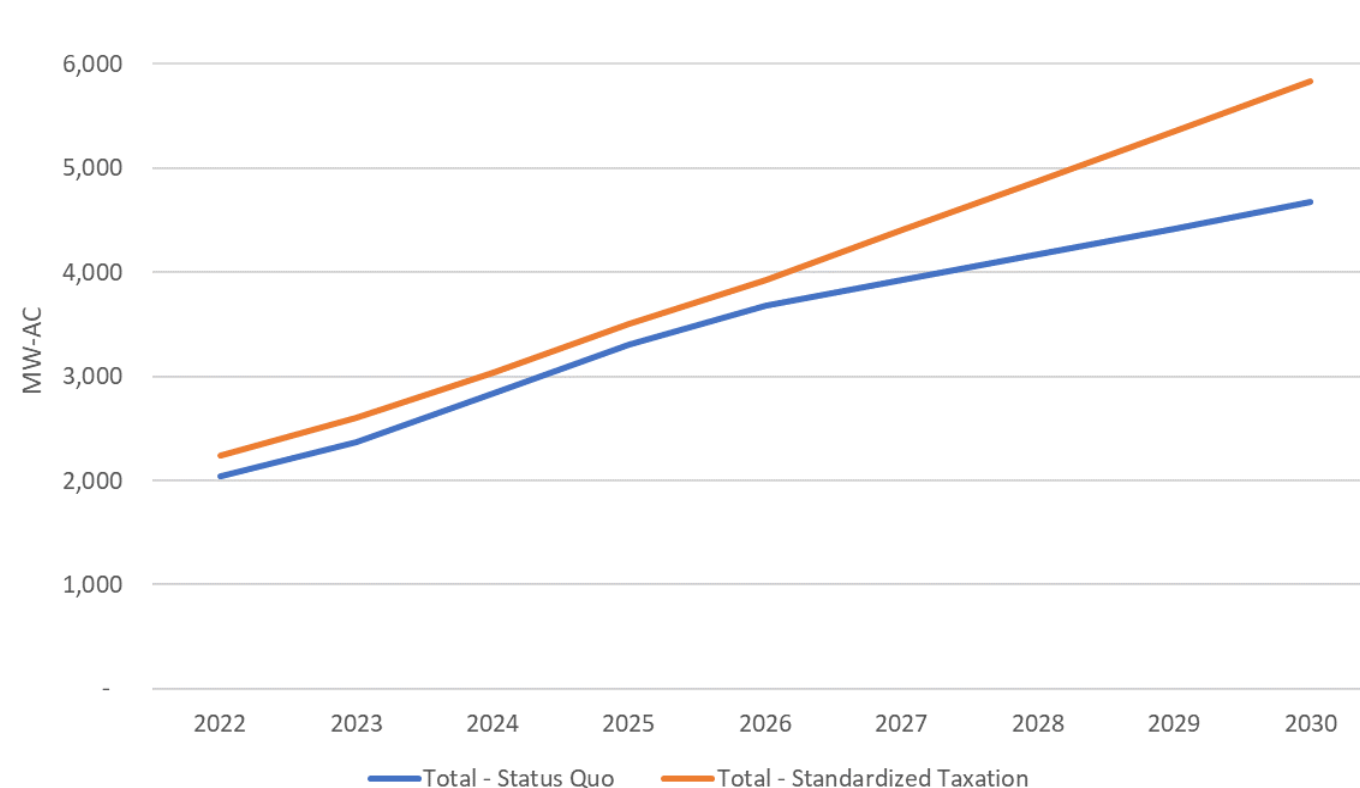
Results: MW buildout – DG

Tax standardization leads to a reduction in project delays and attrition rates, and total cumulative renewables deployment by 2030 could be 25% higher for distributed solar projects than under the status quo.

Distributed Solar Cumulative Operating MW by Utility



Total Statewide Distributed Solar, Tax Standardization vs Status Quo

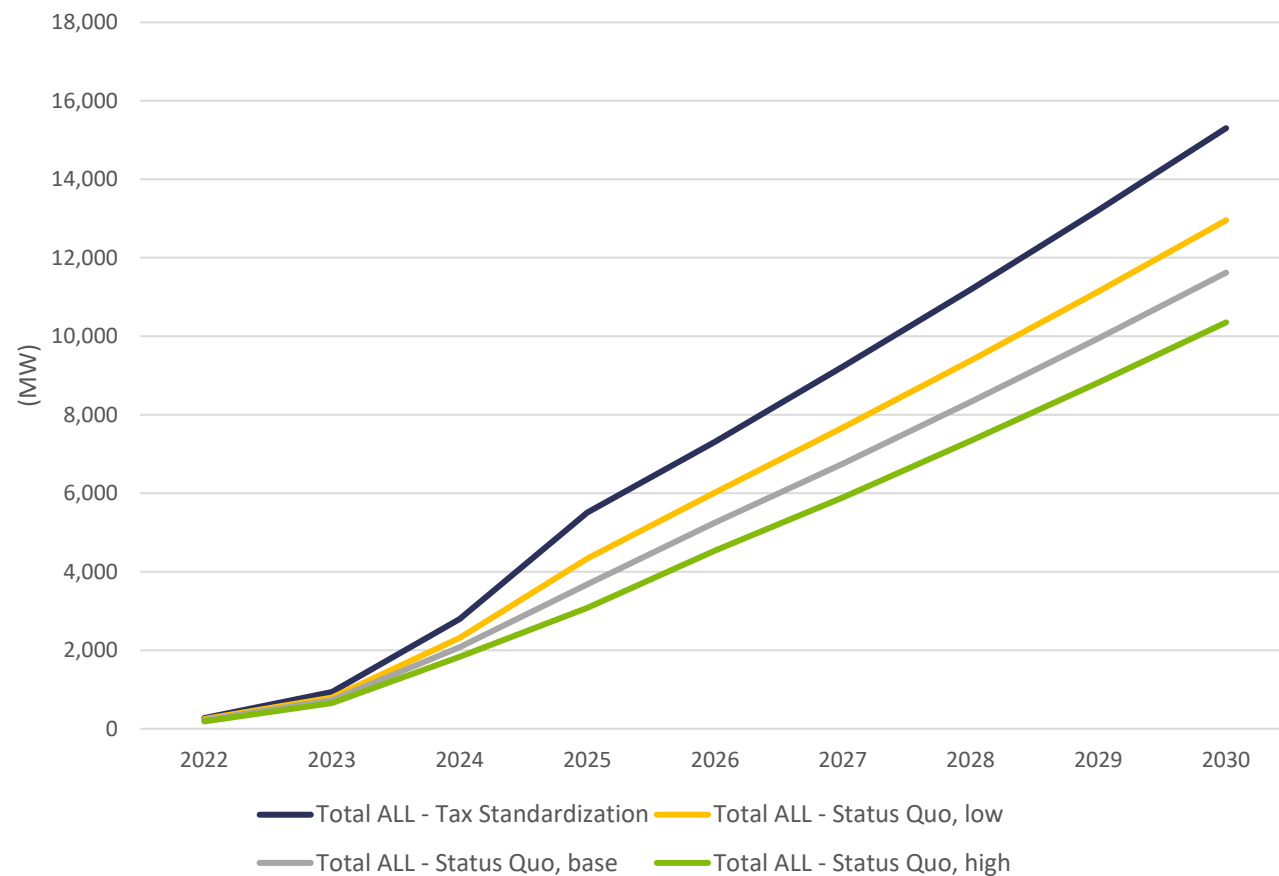


(Represents deployment of ground mount, 1-5 MW_{AC} distributed solar)

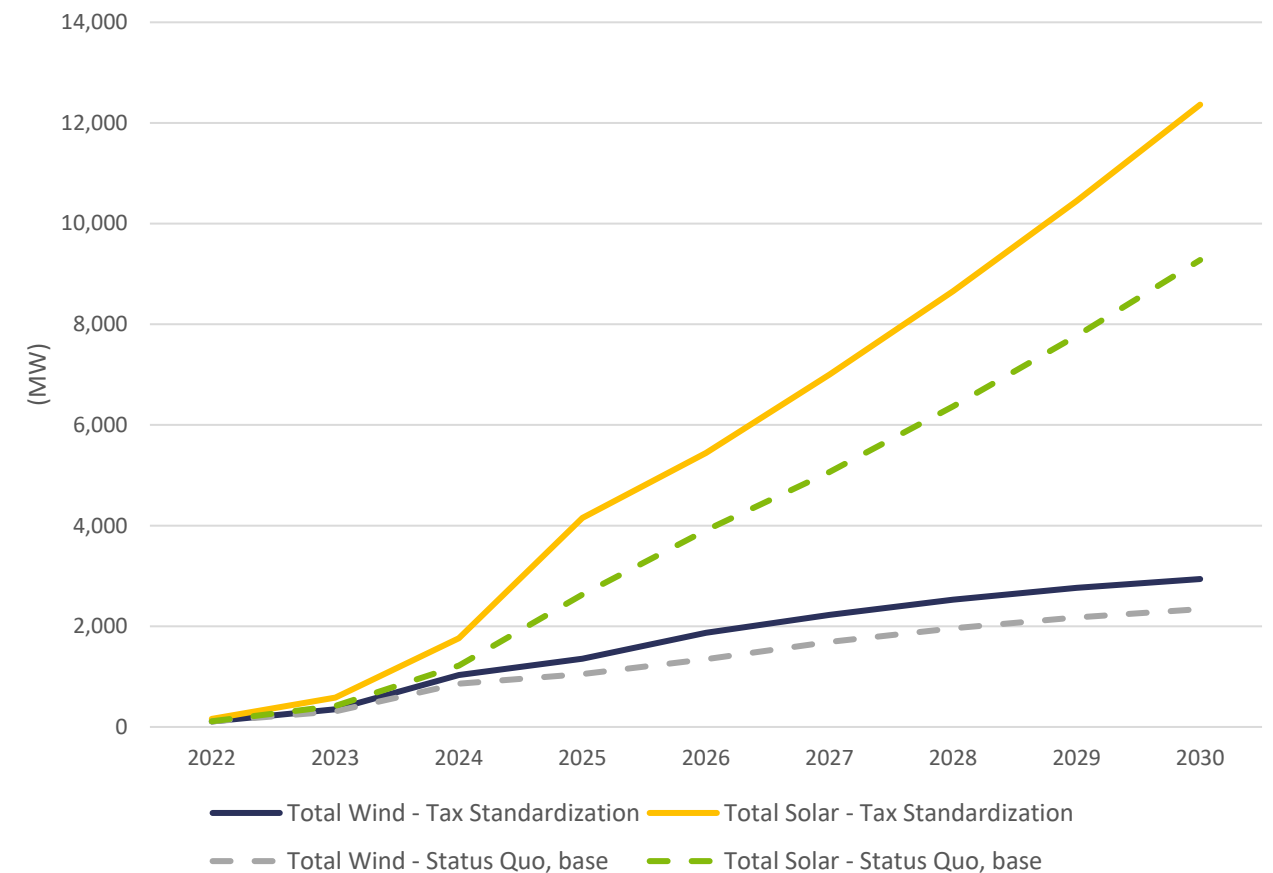
Results: MW buildout – LSR

Under tax standardization, total cumulative LSR deployment by 2030 could *increase* by 3,086 MW for solar and 596 MW for wind, with a total deployment of capacity 32% higher than under the status quo base scenario.

Cumulative Operating LSR MWs, Tax Standardization vs. Status Quo

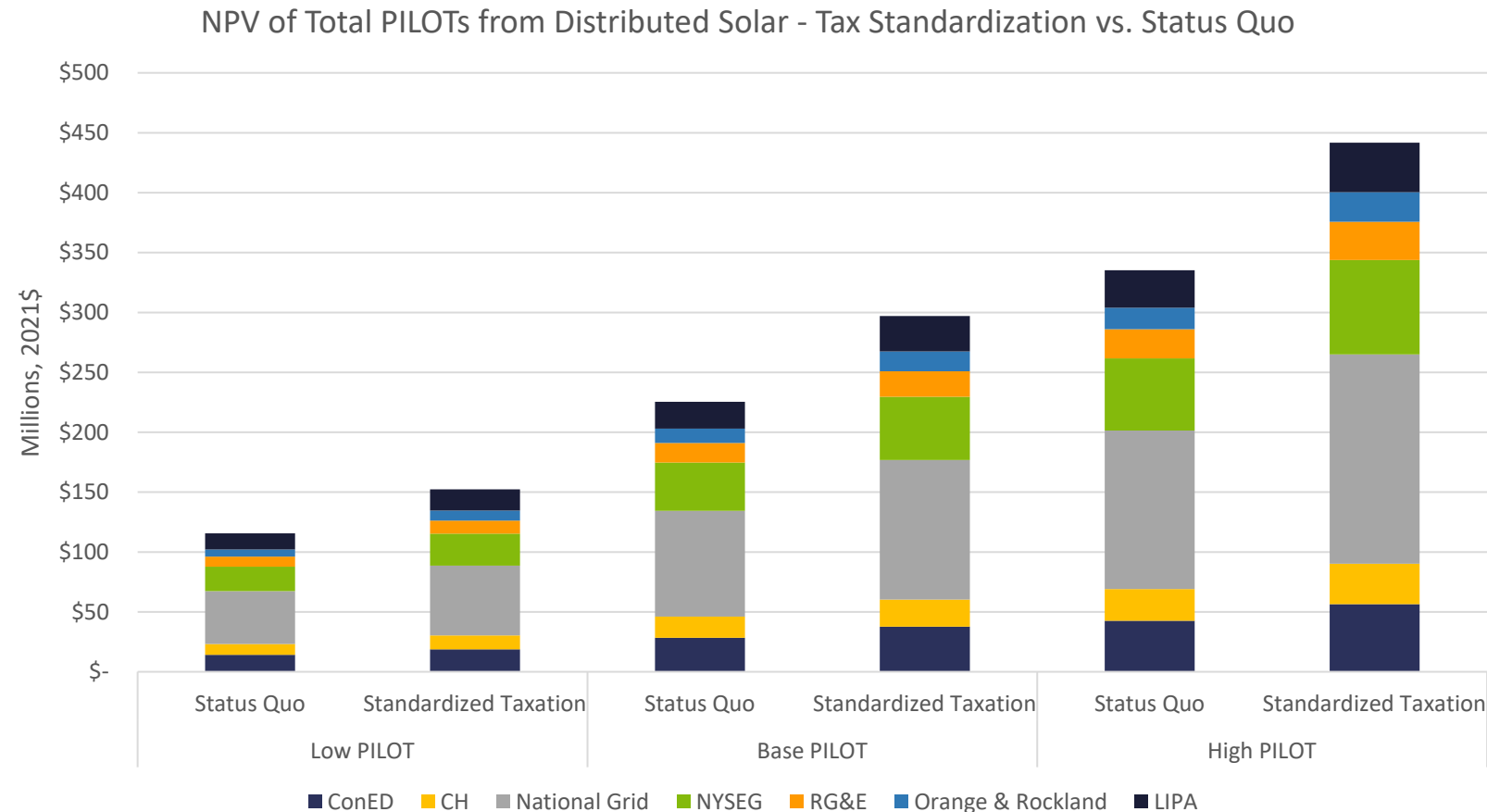


Cumulative Operating LSR MWs, by technology



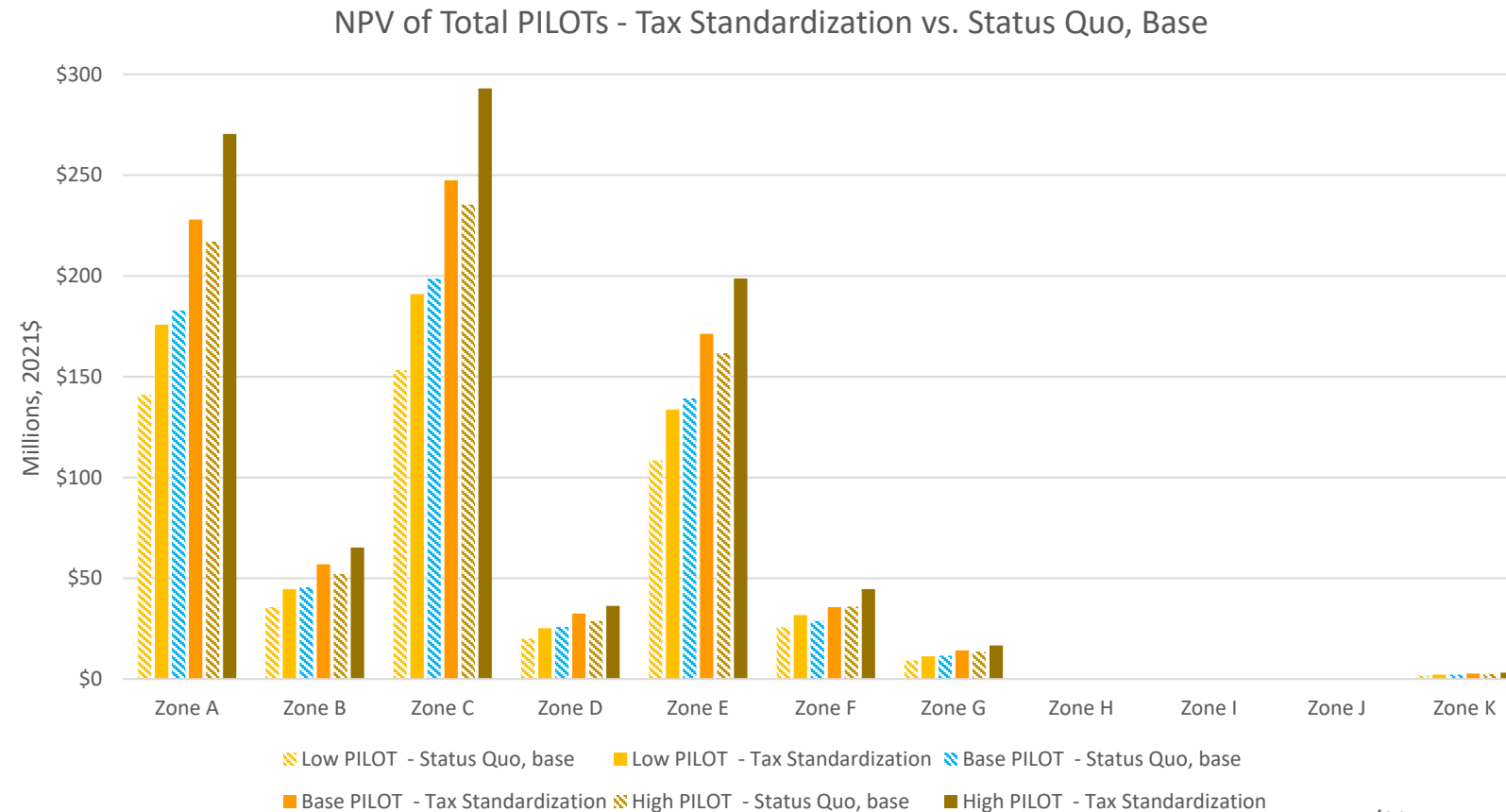
Results: Total DG PILOTs

With tax standardization, New York can expect \$297.0 million in net present value (NPV) of PILOTs statewide from distributed solar projects under the base assumption for PILOT values. This benefit could increase to \$441.7 million under high PILOT values. This compares to a status quo expectation of \$225.4 million under base PILOT values and \$335.3 million under high PILOT values.



Results: Total LSR PILOTs

Total NPV of PILOTs from LSR projects is significantly higher under tax standardization compared to the status quo base scenario; New York can expect \$615.8-\$928.6 million in PILOTs if tax standardization is adopted. In some cases, tax standardization with assumed base PILOT values would result in *higher* PILOTs than the status quo with assumed high PILOT values, as illustrated below.

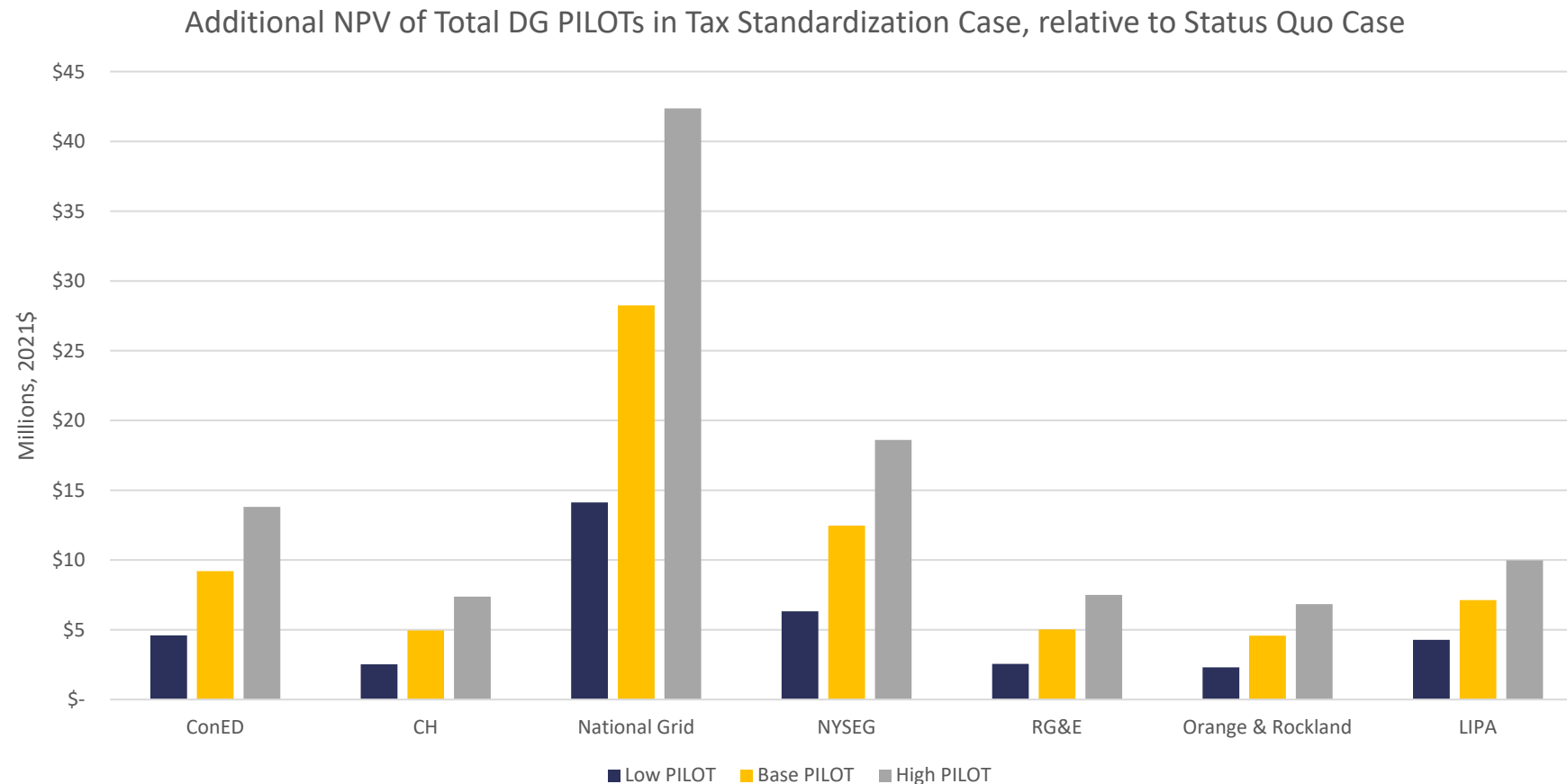


Report source: Section 4.1.2.2

(Note: no LSR development is expected in Zones I-J)

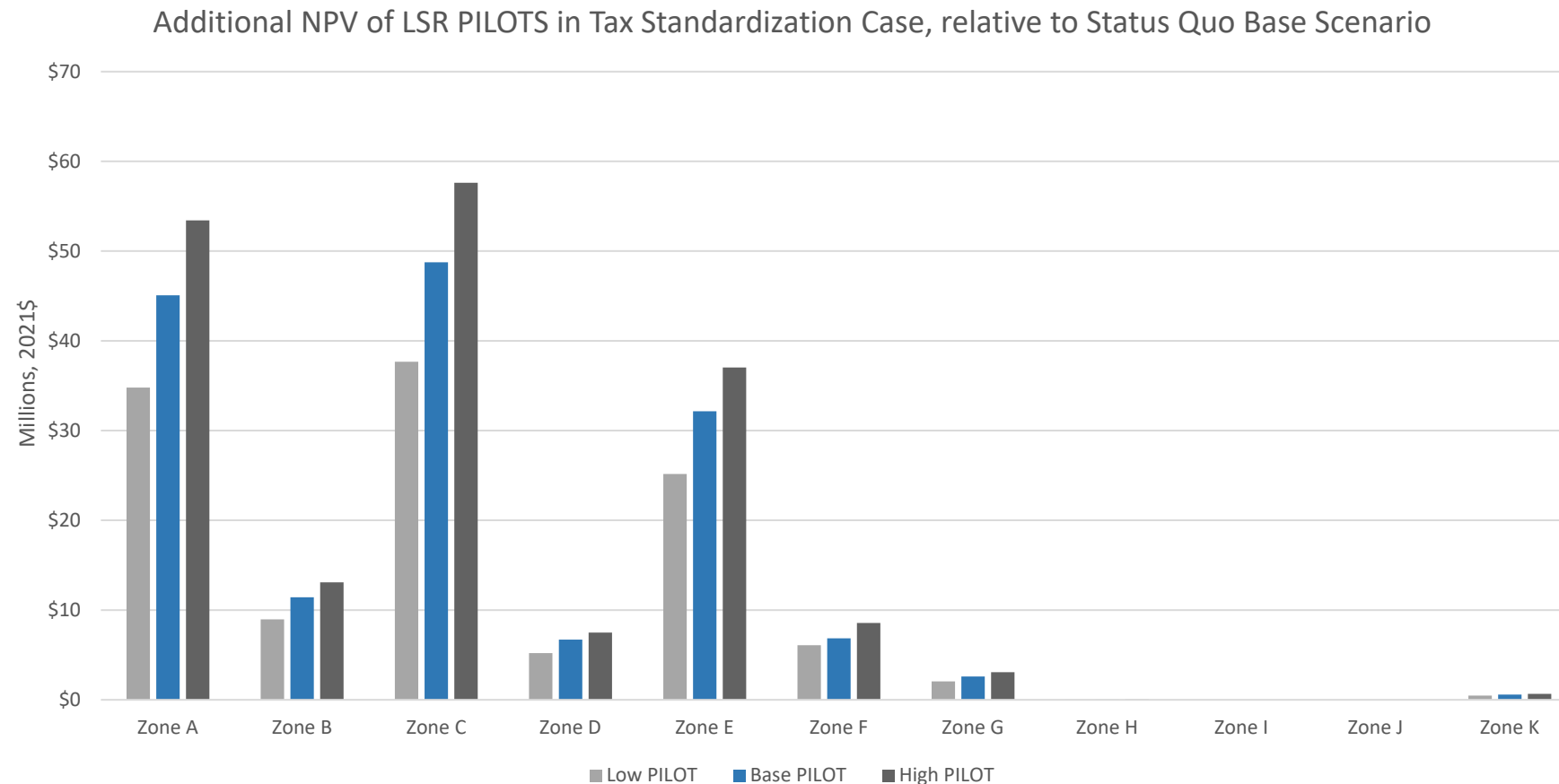
Results: Additional DG PILOTs

Higher deployment under tax standardization leads to additional DG PILOT benefits. Local jurisdictions can expect an *additional* \$71.6 million statewide with the base assumption for PILOT values if tax standardization is adopted. That *incremental* benefit could increase to \$106.5 million with high PILOT values.



Results: Additional LSR PILOTs

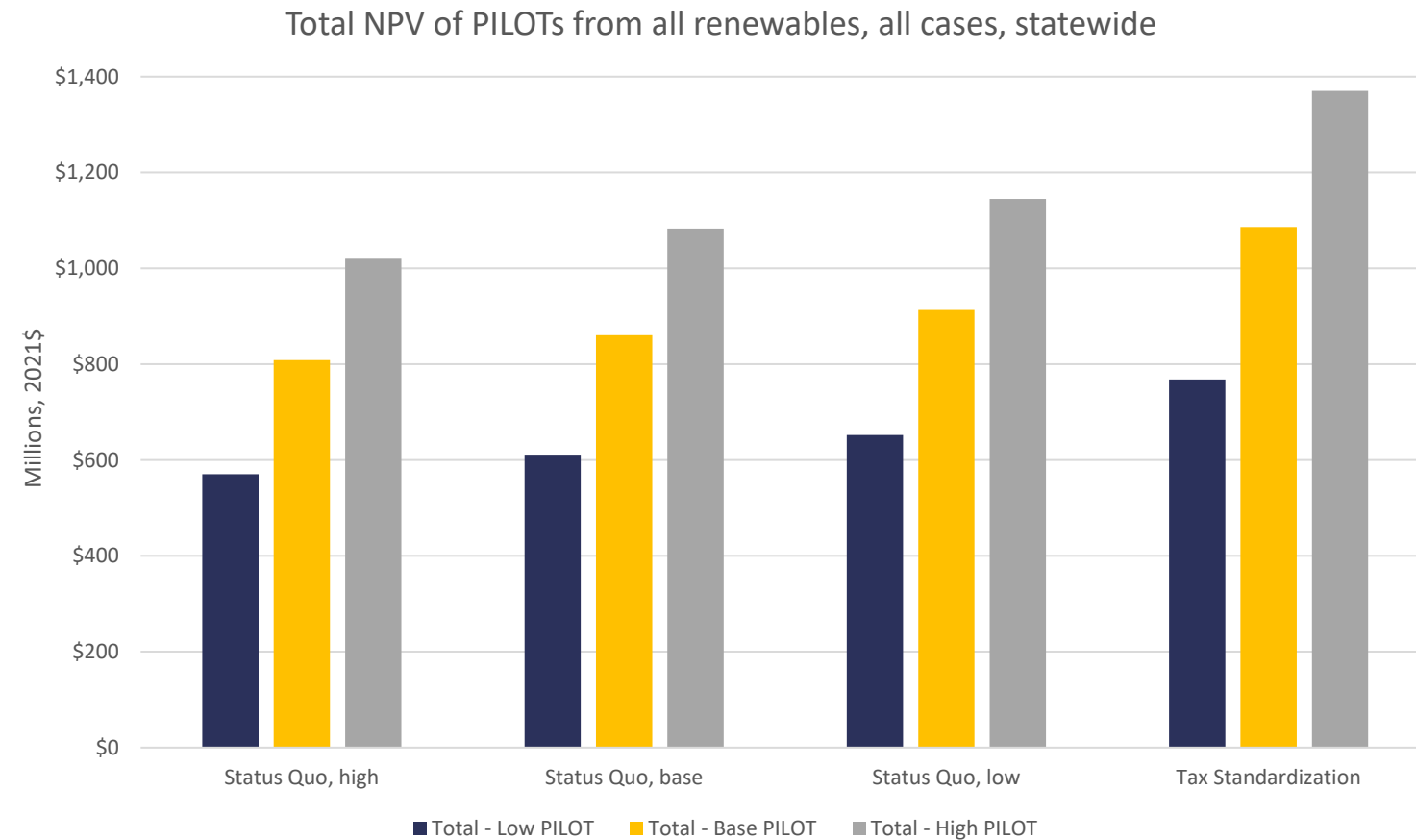
Under tax standardization, local jurisdictions can expect an *additional* \$154.2 million in LSR PILOTs statewide resulting from projects built under a base assumption for PILOT values, realized on a \$/MW basis. The *incremental* benefit of tax standardization policy increases to \$181.0 million under assumed high PILOT values.



(Note: no LSR development is expected in Zones I-J)

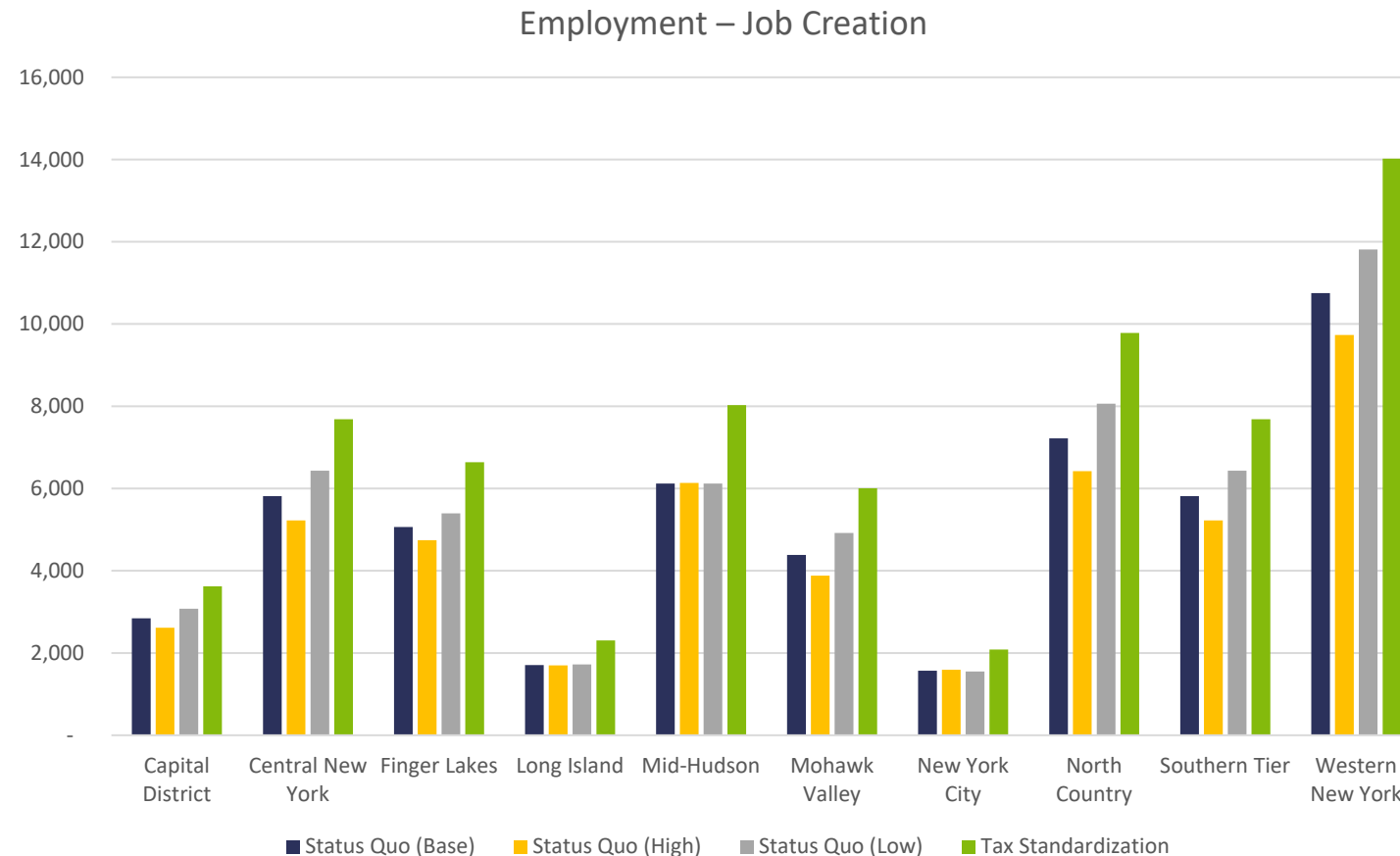
Results: Additional total PILOTs

The graph below represents the total PILOT NPV realized statewide across the four case scenarios, each with low, base, and high PILOT value assumptions. The range of potential total PILOTs is between \$570.4 million (status quo high impact scenario, low PILOT values) to \$1,370.3 million (tax standardization, high PILOT values). The net impact of tax standardization on PILOT revenues ranges from \$116-\$348 million.



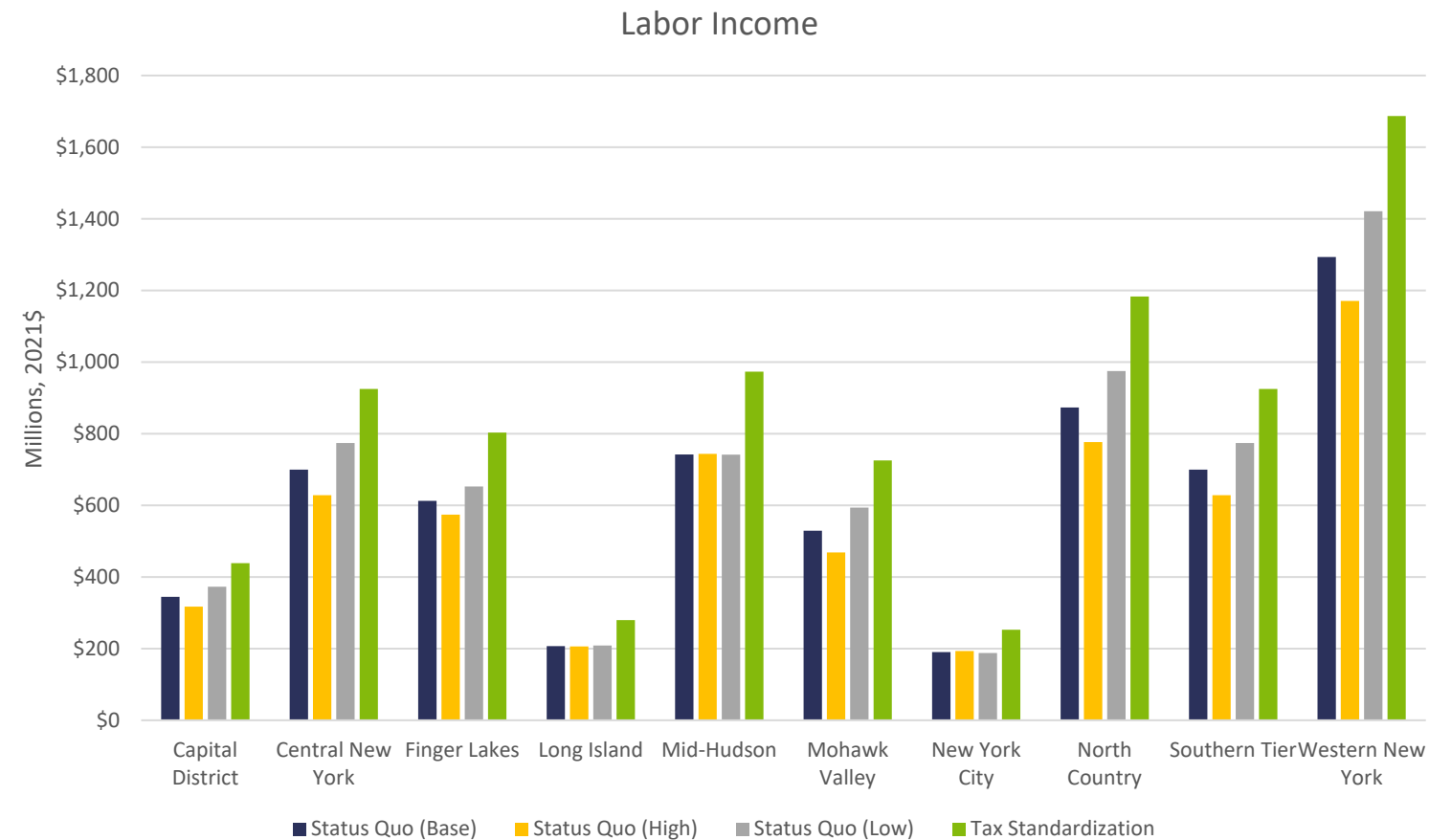
Results: Jobs

Employment figures represent a combination of full-time, part-time and temporary job creation. By 2030, under tax standardization the State can expect about 67,900 jobs, compared to 51,300 jobs with the status quo base scenario. These 16,600 additional jobs represent a 32% increase under tax standardization.



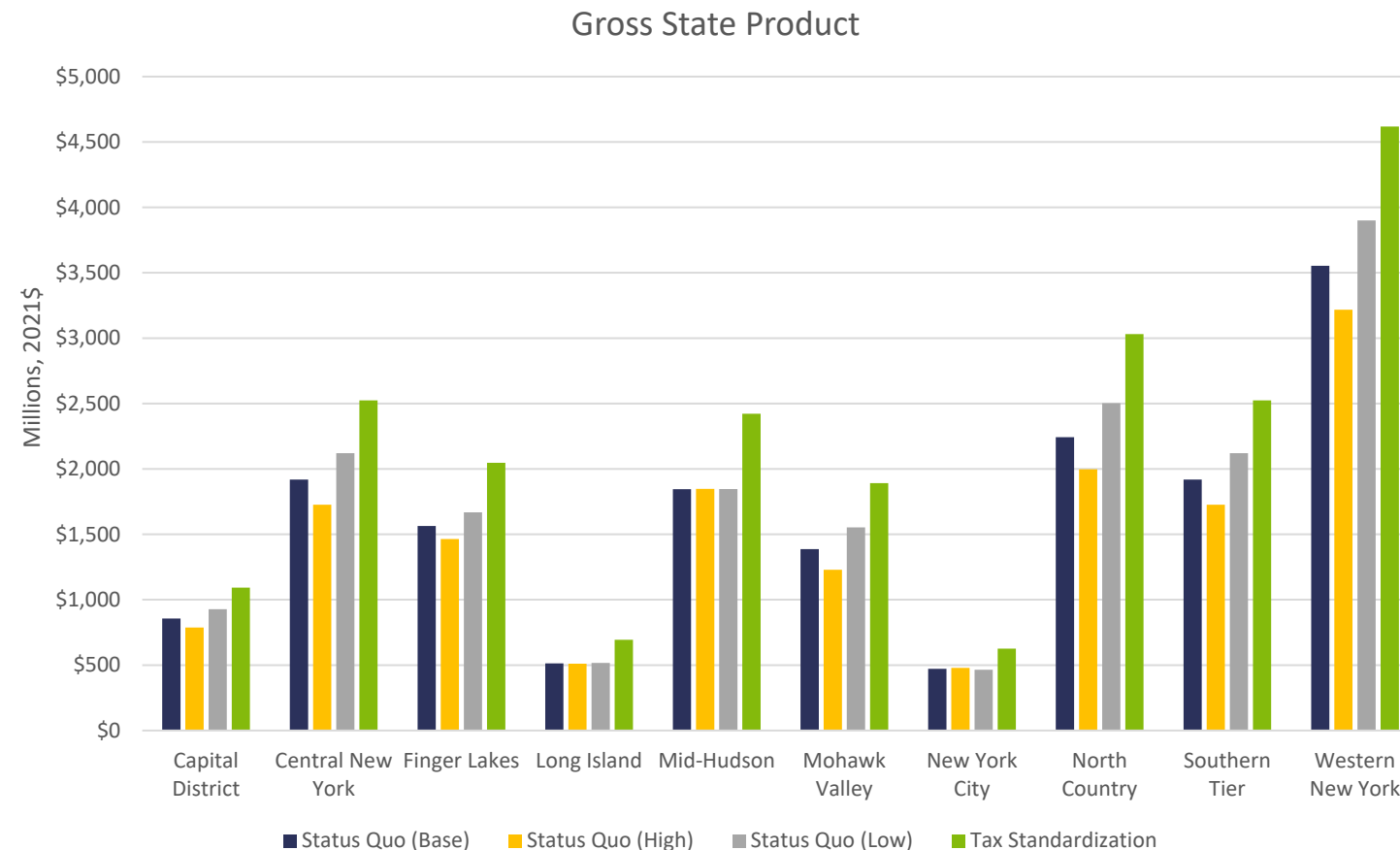
Results: Income

Labor income represents the sum of wages, the value of employee benefits and proprietor income. New York State can expect up to \$8.2 billion in labor income under tax standardization, compared with \$6.2 billion under the status quo base scenario.



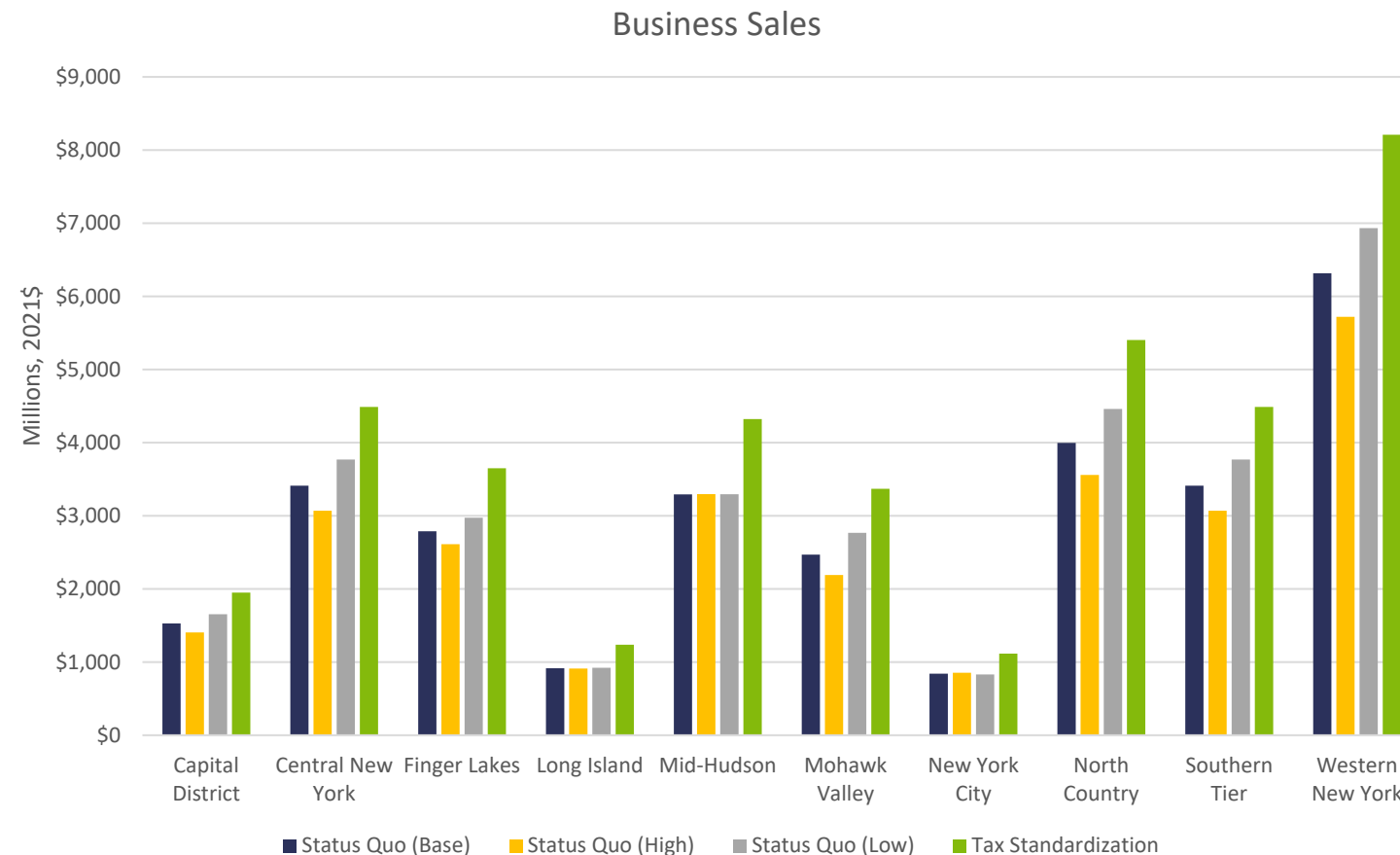
Results: Gross state product

Gross state product (GSP) represents the value of all final goods and services that NY's renewable energy economy produces, represented below in three different status quo scenarios and a tax standardization case. Tax standardization could result in \$21.5 billion in GSP, compared to \$16.3 billion under the status quo base scenario.



Results: Business sales

Business sales or revenue generated by the development of renewable energy projects is expected to increase significantly with the adoption of tax standardization. With this policy change, the State could experience \$38.2 billion in business sales compared with \$29.0 billion under the status quo base scenario.





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