

City of Wilmington – Clean Energy Advisory Committee

Monday, October 13, 2025

Conference Rm 291, Skyline Center, 929 N Front St, Wilmington, NC 28401

1:00 pm-2:30 pm

We encourage Committee members to arrive/join 5-10 minutes early



A G E N D A

Topic
Call to Order / Roll Call
Approval of Minutes – Committee Action
Item #1: Scope of Work – Energy Efficiency Audits of Municipal Facilities - Review scope - Provide edits and/or comments
Item #2: Duke Energy 2025 Resource Plan (filed to NCUC on Oct 1) Review updates and projections of the plan
Item #3: Updates 3A: Resolution Awarding Construction Contract of the Park Maintenance Facility 3B: Duke Energy Rate Comparison of City of Wilmington Accounts 3C: Solsmart Program Status & Certification Level Review
Adjourn Meeting

Meeting Info:

The meeting attendance options will be as follows:

- **Preferred:** In-person at the address above
- Accessible virtually on Zoom:
- <https://us02web.zoom.us/j/85862278919?pwd=YWRibmk5QW1EUFRhMWsZeUtXeWJkQT09>
Meeting ID: 858 6227 8919
Passcode: 353664

While the meeting can be viewed live at the link provided above, the City will also record and archive the meeting which can be viewed on the City's website

at: <https://www.wilmingtonnc.gov/departments/public-services/sustainability/clean-energy-task-force>

City of Wilmington
Scope of Work
Energy Efficiency Audits of Municipal Facilities

1. INTRODUCTION

The City of Wilmington is seeking a qualified consultant to conduct energy efficiency audits of select municipal-owned facilities.

2. WORK TO BE COMPLETED

Energy audits of the municipal-owned facilities shall provide information and analysis required for an AHRAE Level II Audit.

Scope of Work

An audit for a municipal building shall include the following tasks:

Data Collection

- 2.1. Site visit to the facility, including interviews with site operating personnel, review of building or operating system plans, if available, and a thorough walk-through of the facility.
- 2.2. Collect building information and data including square footage, age, construction details (envelope, windows), and past energy-related improvements.
- 2.3. Review utility bills for a 36-month period to evaluate the facility's energy usage patterns, demand charges, and rate structures.
- 2.4. Document the specific building use and the hours of operation, including any seasonal changes.

On-Site Inspection

- 2.5. Conduct a whole-building assessment and equipment inventory, including but not limited to: heating, cooling, ventilation, lighting, and air conditioning systems, the building envelope, and control/energy management systems.
- 2.6. Examine the operation, scheduling, and control set-points of HVAC, lighting, and other major systems to identify potential energy waste.
- 2.7. Inspect building envelope elements like windows and insulation to identify potential energy losses.
- 2.8. Inspect the building roof system for future solar PV array installation opportunity

Analysis

- 2.9. Establish a baseline of current energy performance using historical data and facility information.
- 2.10. Identify and quantify potential energy conservation measures (ECMs), categorizing them as low-cost/no-cost or capital projects.
- 2.11. Perform a detailed financial analysis for each recommended ECM, including estimated implementation costs, operating cost savings, payback periods, and potential incentives or rebates.
- 2.12. Calculate estimated annual energy savings for each energy conservation measure.

Reporting

- 2.13. Prepare and deliver a final report meeting ASHRAE Level II requirements with detailed analysis, specific ECM recommendations with associated costs and savings, and potential next steps for implementation. The report shall include the following:
 - facility details
 - energy conservation measures
 - energy offsets via solar installation
 - annual energy savings
 - annual cost savings
 - total project cost
 - utility incentives
 - net project cost
 - payback period

3. SCHEDULE

TBD



2025 Carolinas Resource Plan



BUILDING A SMARTER ENERGY FUTURE®



Table of Contents

CHAPTERS

Executive Summary

- 1 Powering the Carolinas
- 2 Methodology & Key Assumptions
- 3 Portfolio Development & Evaluation
- 4 Execution Plan

APPENDICES

- A Stakeholder Engagement
- B DEC & DEP System Information
- C Quantitative Analysis
- D Load Forecast
- E Grid Edge & Customer Programs
- F Coal
- G Screening of Supply-Side Resources
- H Renewables & Energy Storage
- I Natural Gas & Low Carbon Fuels
- J Nuclear
- K Transmission System Planning & Grid Transformation
- M Reliability & Operational Resilience
- N Cross-Reference & Glossary

ATTACHMENTS

- Attachment I** - 2025 Solar & Storage ELCC Study



Executive Summary

Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP” and, together with DEC, “Duke Energy” or the “Companies”) have powered the Carolinas for over a century. Today, the Companies have the privilege of serving more than 4.7 million retail customers across North Carolina and South Carolina with oversight from the North Carolina Utilities Commission (“NCUC”) and the Public Service Commission of South Carolina (“PSCSC”). Additionally, the Companies provide power to wholesale customers, including municipal and cooperative power providers, that supply utility service to customers in areas not served by Duke Energy. As a direct result of constructive policy and regulation in both states, Duke Energy currently owns and operates approximately 36,600 megawatts (“MW”) of diverse electric generating capacity dispersed throughout a 52,000-square-mile service territory that powers the economic vitality of the Carolinas.

The 2025 Carolinas Resource Plan (the “Plan” or “Resource Plan”) reflects Duke Energy’s continued commitment to serving its customers and communities across the Carolinas, which is underpinned by a strong foundation and track record of safety and operational excellence. As North Carolina and South Carolina experience significant economic growth, this foundation will remain vital to how the Companies serve the Carolinas’ future energy needs. This Plan builds upon the aligned dual-state 2023 Carolinas Resource Plan approved by the NCUC and PSCSC (the “Commissions”) in 2024 and presents an updated Execution Plan to continue to reliably meet the needs of customers in the most reasonable, least-cost manner.

In this era of growing and dynamic energy demand, Duke Energy's resource planning strategy remains the same – continue to ensure adequate resources to reliably meet power system demands through a diverse and increasingly clean generation portfolio.

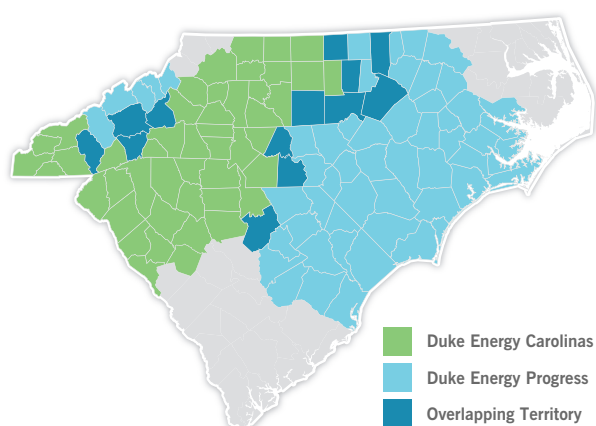
The Companies' Plan is comprehensive and includes maximizing the value of existing resources, leveraging Grid Edge and customer programs, and adding new supply-side resources. Together, the planned execution activities will ensure that the Companies are prepared to reliably serve customers.

Building on the Current Dual-State Carolinas Resource Plan

In the fall of 2024, the Commissions approved the Companies' 2023 Carolinas Resource Plan, determining that the Companies' robust modeling and analytical process resulted in the most reasonable, least-cost path to meet both states' policy goals and to reliably plan for the integrated system needs of customers in both North Carolina and South Carolina. Consistent with the resource needs identified in that 2023 Carolinas Resource Plan, the Commissions reviewed and confirmed that the Companies' proposed near-term execution activities were reasonable steps to take, supporting the Companies' plans for significant new generation resources, including executing near-term actions to procure and develop new dispatchable and efficient natural gas and energy storage resources, along with fuel-free solar generation. In addition, the approved Near-Term Action Plan ("NTAP") included activities to evaluate the development of advanced nuclear and other long lead-time generating resources to ensure that the Companies are able to serve existing customers and meet future demand with a diverse mix of resources.

To serve growing customer demand, the Companies have been actively executing the NTAP that was determined to be reasonable for execution by the Commissions.¹ Furthermore,

**Figure 1: Powering the Carolinas
DEC & DEP Service Territories**



consistent with the Commissions' findings,² the Companies are continuing plans, with recommended adjustments, for the orderly retirement and replacement of the remaining aging coal units on the system, which have reliably served customers for, on average, over 50 years. Updates on the NTAP, relative to the prior plan authorized by the Commissions, are discussed below and throughout the Plan. This includes plans to pursue early development activities for new nuclear generation, including both small modular reactors ("SMR") and large light-water reactors ("LLWR") such as the Westinghouse AP1000®.

¹ NCUC Order Accepting Stipulation, Granting Partial Waiver of Commission Rule R8-60A(d)(4), and Providing Further Direction for Future Planning at 176-179, Docket No. E-100, Sub 190 (Nov. 1, 2024) ("2023 CPIRP Order"); Order Approving 2023 Integrated Resource Plan, PSCSC Order No. 2024-767 at 209, Docket Nos. 2023-8-E, 2023-10-E (Nov. 25, 2024) ("Order Approving 2023 IRP")

² 2023 CPIRP Order at 175; Order Approving 2023 IRP at 36, 147

Powering the Carolinas in a Dynamic Planning Environment

Building on the execution activities that are in-flight, Duke Energy's 2025 Carolinas Resource Plan outlines the Companies' proposed roadmap for continuing to meet the growing capacity and energy needs of customers while prioritizing reliability and customer value. The current energy landscape and planning environment in which

the Companies operate has continued to evolve since the most recent resource plan approvals by the Commissions just last year. The Companies' "check-and-adjust" planning approach allows for prudent monitoring, identification, and reaction to these changing policy, market, and industry dynamics, which are outlined in Figure 2 below.

Figure 2: Key Drivers Impacting Resource Planning



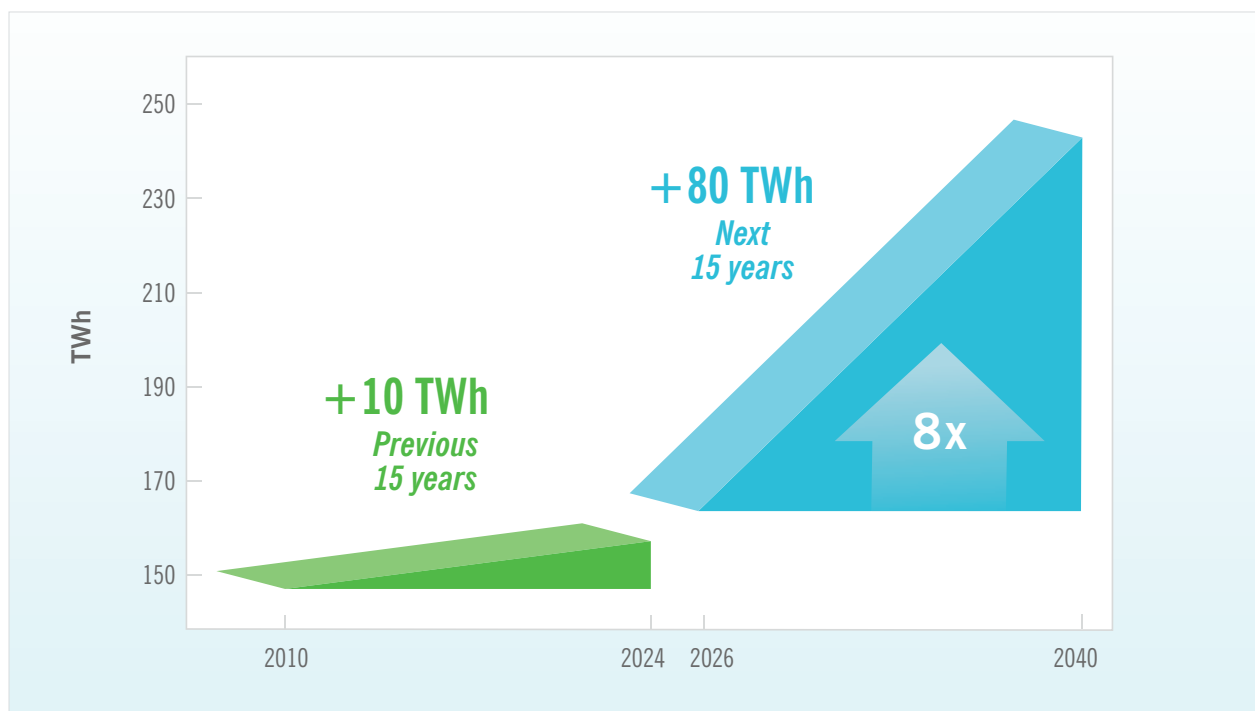
Planning in a Period of Unprecedented Load Growth

The 2025 Carolinas Resource Plan reflects increasing electricity demand across the Carolinas at an unprecedented pace. Over the past 15 years, customer energy needs grew by approximately 10 terawatt-hours (“TWh”) – looking ahead, growth over the next 15 years is forecasted to surge *eightfold*, with energy needs increasing by nearly 80 TWh. To put this future growth in perspective, total electricity consumption in the state of South Carolina was 81 TWh in 2023.³ This growth, which is highlighted in Figure 3 below, is being driven primarily by significant economic development

activity within the Carolinas, along with strong residential customer growth and electrification.

The Carolinas continue to rank in the top 10 fastest-growing states,⁴ and North Carolina was again ranked as America’s Top State for Business in 2025, marking the third time in four years that the state has earned that recognition.⁵ The North Carolina Department of Commerce recently highlighted that in 2025 alone, companies have announced economic development projects producing more than 25,000 jobs and \$19 billion in investments, the bulk of which is for new manufacturing facilities.⁶ South Carolina is similarly experiencing significant economic development activity. The South Carolina

Figure 3: Surging Energy Needs



³ U.S. Energy Information Administration (Oct. 2024), Annual Electric Power Industry Report, Form EIA-861

⁴ U.S. Census Bureau, Vintage 2024 Population Estimates, table available at <https://www.census.gov/newsroom/press-releases/2024/population-estimates-international-migration.html>

⁵ Cohn, Scott, CNBC, America's Top States for Business 2025: The Full Rankings (July 10, 2025), available at <https://www.cnbc.com/2025/07/10/top-states-for-business-americas-2025-the-full-rankings.html>

⁶ Comments of North Carolina Department of Commerce at 1-2, Docket No. E-100, Sub 208 (Aug. 22, 2025)

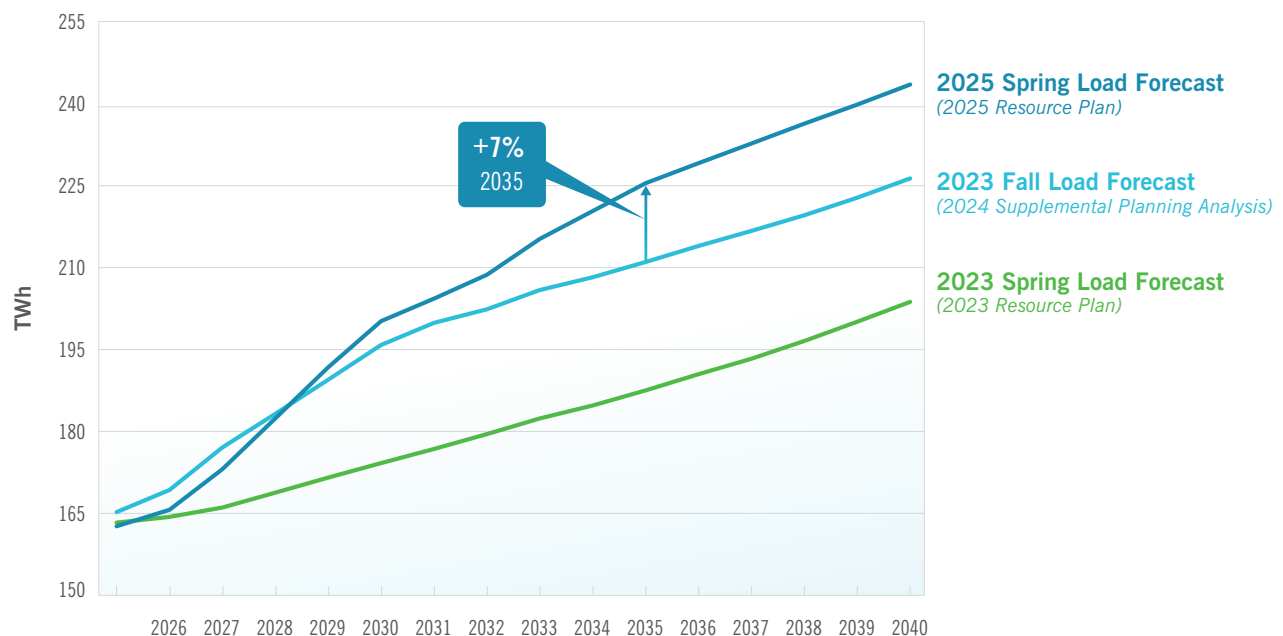
Department of Commerce recently announced the state's successful recruitment of 5,500 new jobs and \$8.19 billion in capital investment in 2024.⁷

Since June 2024, the amount of planned economic development large load additions to the DEC and DEP systems in an advanced stage of development has increased by approximately 50%, representing an additional 2,000 MW of new high load factor customer additions. Figure 4 below highlights the progression of the Companies' energy forecast since the 2023 Spring Load Forecast and 2023 Fall Load Forecast, which informed the initial 2023 Carolinas Resource Plan and 2024 Supplemental Planning Analysis, respectively. Although the Companies have anticipated growth, the scale and speed of current development necessitate a more proactive planning approach, including timely addition of new resources to ensure continued reliable service.

Evolving State & Federal Policy Landscape

The 2025 Carolinas Resource Plan incorporates significant policy changes at the state and federal levels. In North Carolina, the Power Bill Reduction Act, Session Law 2025-78 ("Senate Bill 266"), eliminates the 70% interim carbon reduction goal and introduces new mechanisms for cost recovery and coal plant securitization. These changes provide new tools for managing the transition of the generation fleet while ensuring reliability and maintaining cost-effective service for customers. In South Carolina, the Energy Security Act ("Act 41") also emphasizes reliability, customer needs, and supporting economic development through careful planning and investment in a diverse energy mix. These legislative changes have been incorporated into the Companies' analysis supporting the Plan.

Figure 4: Progression of Load Forecast Over Time Highlights Rising Energy Needs



⁷ South Carolina Department of Commerce (January 2025), available at <https://www.sccommerce.com/news/south-carolina-industry-recruitment-reaches-819-billion-2024>

At the federal level, the proposed repeal of certain environmental regulations, including the Section 111 rules under the Clean Air Act issued by the U.S. Environmental Protection Agency in May 2024, will help to enable flexibility for existing coal and new natural gas facilities to continue providing dispatchable baseload generation for customers. At the same time, limitations on federal energy tax credits for solar and wind will increase the cost of new solar and wind projects. Executive orders have introduced further constraints on wind development, while others signal support for advanced nuclear technologies and existing coal operations. The Companies continue to closely monitor the changing policy and regulatory landscape, recognizing that federal policy can shift quickly and impact planning decisions.

Macroeconomic Pressures & Changing Market Conditions

Macroeconomic pressures continue to impact the cost and viability of new resources. Inflation, interest rates, and import tariffs are increasing the costs to build and maintain energy infrastructure across all resource types. Supply chain constraints, particularly for labor and long-lead materials and equipment, continue to pose risks to project timelines and cost certainty. These factors underscore the importance of careful resource planning to minimize customer bill impacts.

The 2025 Carolinas Resource Plan includes targeted extensions to select coal unit retirement dates, which will help the Companies reliably serve growing demand across the Carolinas. While these extensions are supported by recent changes to environmental policy noted above, substantial investment in these older, less-efficient generation resources is not in customers' best interest. Growing constraints within the coal industry continue to present operational

and planning challenges. Reductions in coal supply and transportation options, a shrinking workforce, and increasingly constrained material supply chains within the industry represent risks associated with delaying coal unit retirements beyond the recommended time frames presented in this Plan.

Leveraging Grid Edge & Customer Programs

As Duke Energy prepares to serve growing demand, it is also leveraging a suite of Grid Edge and customer programs to enhance grid flexibility and long-term system reliability. These programs help reduce, shape, and shift load, potentially deferring or avoiding the need for new peak generation resources. Among these offerings are energy efficiency and demand-side management programs that align with evolving customer expectations for more personalized energy solutions that give them greater control over their energy footprint.

The Plan maintains a minimum annual energy efficiency savings target of 1% of eligible load (defined as total retail sales minus commercial/industrial customers who have opted out), though achieving this target depends on favorable regulatory outcomes and strong customer participation. Winter demand response capability is projected to grow to 1,100 MW by 2030 and 1,800 MW by 2050 – providing critical capacity during peak periods and bolstering system resiliency as the Carolinas experience significant growth.

Checking & Adjusting

This Plan highlights the continuing benefits of the check-and-adjust framework that supports iterative planning cycles and ensures ongoing execution activities remain in customers' best interests and are consistent with the most reasonable, least-cost

plan. The 2025 Carolinas Resource Plan includes an updated Execution Plan that is informed by the current complex and dynamic environment and ensures that the Carolinas are prepared to serve projected load growth during this critical period.

The Plan assesses material policy changes and market evolutions over the past year, and the Companies’ analysis reaffirms that in-flight execution activities identified in the prior planning process remain beneficial for customers. This underscores the no-regrets nature of previously approved execution activities. Where necessary

and appropriate based on recent experience, the Companies are updating the pace of execution to support growing customer needs, maximize opportunities, and mitigate risks. The updated Execution Plan includes important modifications driven by changes in policy and is directionally consistent with the previously approved Execution Plans, which the Companies are actively progressing. This underscores the value and effectiveness of the check-and-adjust resource planning process in reasonably identifying plans that offer benefits to customers under a range of policy and market conditions.

Stakeholder Engagement

To develop the 2025 Carolinas Resource Plan, the Companies built upon the foundation of collaborative engagement with stakeholders that was conducted for the 2023 Carolinas Resource Plan. Over the course of four months, the Companies held four public meetings, drawing in more than 350 individuals representing over 180 organizations across the Carolinas, to gather feedback on the Plan’s modeling assumptions and inputs. Meetings were organized to facilitate comprehensive discussions around complex topics

related to resource planning. To enhance the focus on the more technical aspects of resource planning, stakeholders from varying backgrounds participated in topical meetings as self-identified technical representatives and presented their perspectives to the Companies and a diverse group of attendees that included customers, environmental advocates, community leaders, renewable energy developers, and other industry representatives. Figure 5 below outlines the broad engagement throughout the stakeholder meeting series.

Figure 5: Stakeholder Participation Across the 2025 Engagement Series



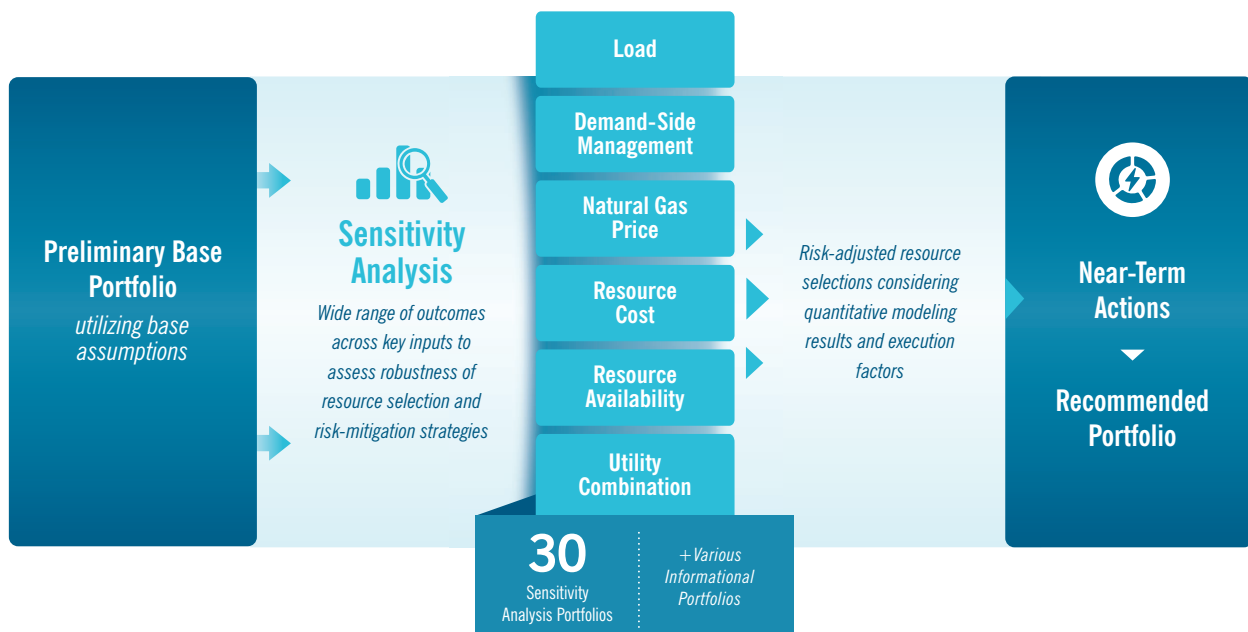
Analytical Framework

The Companies employed the same general modeling approach that was found reasonable in prior resource plan proceedings. This approach is designed to determine the most reasonable, least-cost path to continue to reliably meet the energy needs of customers over the Base Planning Period (2026-2040) while planning to achieve long-term carbon neutrality from generating resources by 2050. To accomplish this, the Companies developed a Preliminary Base Portfolio, which produces an initial set of near-term actions. These near-term actions are then refined through extensive sensitivity analysis – consisting of over 30 sensitivity portfolios that further evaluate risks,

uncertainties, and potential tradeoffs across planning objectives – to produce the Companies' recommended NTAP. The recommended NTAP is then reintegrated into the Preliminary Base Portfolio to produce the Companies' Recommended Portfolio.

Figure 6 below provides an overview of this approach and the broad array of sensitivity analyses performed across several key planning inputs, including resource construction costs, timing and annual availability of resources, fuel commodity prices, DEC and DEP utility combination, and varying levels of demand-side management.

Figure 6: Developing a Balanced Execution Strategy Through Robust Sensitivity Analysis



Execution Plan & Near-Term Action Plan Resources

The Companies' Execution Plan defines updated near- and intermediate-term execution activities and necessary resource amounts for the period 2026-2034. The near-term actions occur between 2026-2028 and constitute the NTAP, which

builds upon the Companies' progress executing in-flight resources approved in the previous plan. The remaining execution actions and resource additions included in the Execution Plan are needed over the intermediate term (2029-2034)

to reliably meet the needs of existing and future customers. Importantly, the Companies' proposed activities represent a two-year progression and evolution of the previous resource plan's Execution Plan, making appropriate adjustments to account for rapid load growth and changing policy and market conditions.

The 2025 Execution Plan maximizes the value of existing assets and builds upon Duke Energy's diverse generation portfolio by recommending new supply-side resources, making targeted investments in the Companies' transmission system, and leveraging Grid Edge and customer programs to help reduce, shape, and shift system demand. The NTAP reflects risk mitigation and executability considerations for the model-selected amounts for solar, battery storage, and natural gas resources across various planning scenarios. This approach ensures the Plan is executable and supports system reliability for existing and future customers across the Carolinas. Further, the timeline for deploying new resources is extending while load growth opportunities are accelerating – underscoring the importance of timely and constructive regulatory and stakeholder support for near-term activities identified in the Plan.

Reaffirming & Progressing Near-Term Resource Needs

The updated NTAP reflects both continuity and strategic adjustments across a diverse portfolio of mature energy technologies. Figure 7 below highlights this continuity and presents the combined cycle ("CC"), combustion turbine ("CT"), solar, and battery storage resources in the 2025 NTAP relative to the previous plan's NTAP.

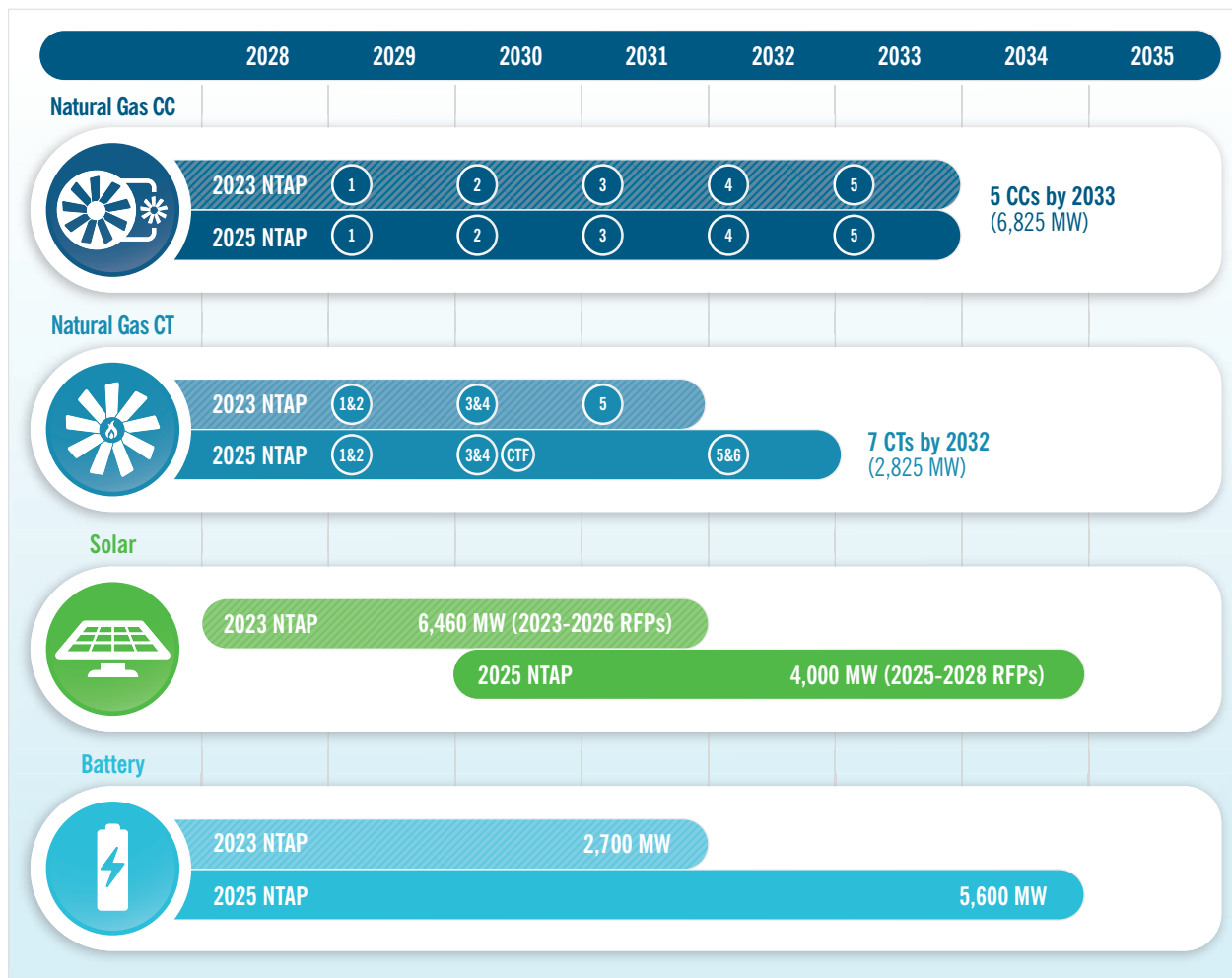
- **Natural Gas Combined Cycle and Combustion Turbine:** The Companies are progressing actions related to the deployment of new advanced class

natural gas generation resources that were identified in the 2023 Carolinas Resource Plan. These highly efficient facilities provide dispatchable generation that can be leveraged across all seasons and is needed to serve existing and future customers and facilitate the orderly retirement of the Companies' aging coal fleet. The 2023 Carolinas Resource Plan NTAP identified the need for five new CC facilities through 2033 and five new CT facilities through 2031 to improve resource adequacy of the system and support ongoing efforts to grow into the Companies' 22% planning reserve margin. The 2025 NTAP continues to identify the need for five CCs by 2033 while increasing the need for CT capacity to 2,825 MW by 2032 – up 700 MW from the last plan.

- **Solar:** Solar continues to represent an important resource in the Plan, providing customers with the benefits of low-cost, fuel-free energy while supporting a diverse resource mix. The Companies plan to procure a total of 4,000 MW of solar through competitive procurement processes in 2025-2028 to bring in-service between 2030-2034. This total accounts for recent policy changes and reflects a moderation in average annual solar procurements relative to the 2023 NTAP, which included annual procurements of over 1,600 MW per year. The 2025 NTAP maintains a 1,700-MW target in the 2025 procurement process to maximize the benefits of the remaining federal energy tax credits for solar, then targets an average of approximately 770 MW per year in the 2026-2028 procurements.

- **Battery Energy Storage:** The Companies' recommended battery energy storage deployment is expanded in the Companies' 2025 NTAP, with a total of 5,600 MW targeted by 2034 – an increase of 2,900 MW over the 2023 NTAP that only included projects through 2031. This includes both standalone and paired battery energy storage systems, with 720 MW included

Figure 7: Natural Gas, Solar, & Battery Storage Resources in NTAP



Note: “2023 NTAP” reflects resources as proposed in the Supplemental Planning Analysis to the 2023 Plan; “CTF” denotes the Smith F-class CT; “RFP” denotes Request for Proposals (annual procurement process)

in the 2025-2028 procurements. These additions are critical to bolstering resource adequacy and serving growing demand, benefit from shorter development timelines, and are more scalable projects relative to new natural gas projects.

These near-term actions represent an appropriate and risk-informed evolution of the Companies’ Plan. By adjusting procurement volumes, accelerating timelines, and maintaining flexibility across technologies, the NTAP ensures the Companies are well positioned to meet the Carolinas’ growing

energy needs in a manner that maintains or improves reliability while keeping costs as low as possible for customers.

Maximizing Existing Nuclear Fleet and Planning for New Nuclear

For decades, customers have reaped enormous benefits from the Companies’ high-performing and low-cost nuclear resources in the Carolinas, which constitute the largest regulated nuclear fleet in the U.S. The Companies are leveraging every

opportunity to maximize the value provided by these resources, including through power uprate projects and the pursuit of subsequent license renewals to extend their operational life from 60 years up to 80 years. Modeling reaffirmed new nuclear generation to be a foundational resource in the 2025 Resource Plan. The Companies believe it is critical to continue carefully and deliberately assessing the potential for new nuclear resources – specifically SMRs and LLWRs – to build on the legacy of their existing nuclear fleet in the Carolinas and ensure future generations will similarly enjoy reliable and clean baseload energy.

The Companies’ proposed NTAP recommends expanded licensing activities, targeting 2037 in-service for new nuclear generation, and provides

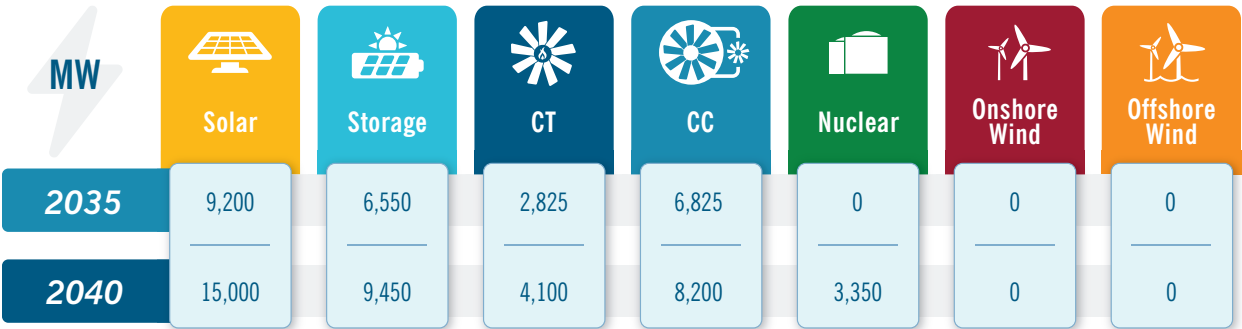
optionality for either SMRs or LLWRs in the first and subsequent deployments. However, for the deployment of LLWRs, substantial procurement and site preparation activities beyond those requested in the NTAP will be required to meet this date. Further, it is critical that additional customer protections be obtained before committing to these substantial procurements and construction, as it would be unreasonable to ask customers to bear cost overrun risks without specific safeguards in place – which include obtaining a higher degree of cost and schedule certainty and securing cost overrun protection or mitigation. Obtaining these protections in a timely manner will be critical to achieving an in-service date of 2037. Without these safeguards in place, the Companies do not believe it is prudent to incur costs beyond those proposed in the NTAP.

Recommended Portfolio

The Companies’ 2025 Resource Plan provides a detailed review and evaluation of the Companies’ risk-informed NTAP within the Resource Plan modeling. Specifically, after developing the NTAP based on planning objectives, portfolio analysis, and risk considerations, the Companies then incorporated

the recommended NTAP resources into detailed modeling to produce the Recommended Portfolio. This additional analytical step confirms that the NTAP delivers near-term customer benefits and that the broader Recommended Portfolio provides long-term value. By quantifying and assessing the

Figure 8: Supply-Side Resource Additions by 2035 & 2040 in Recommended Portfolio

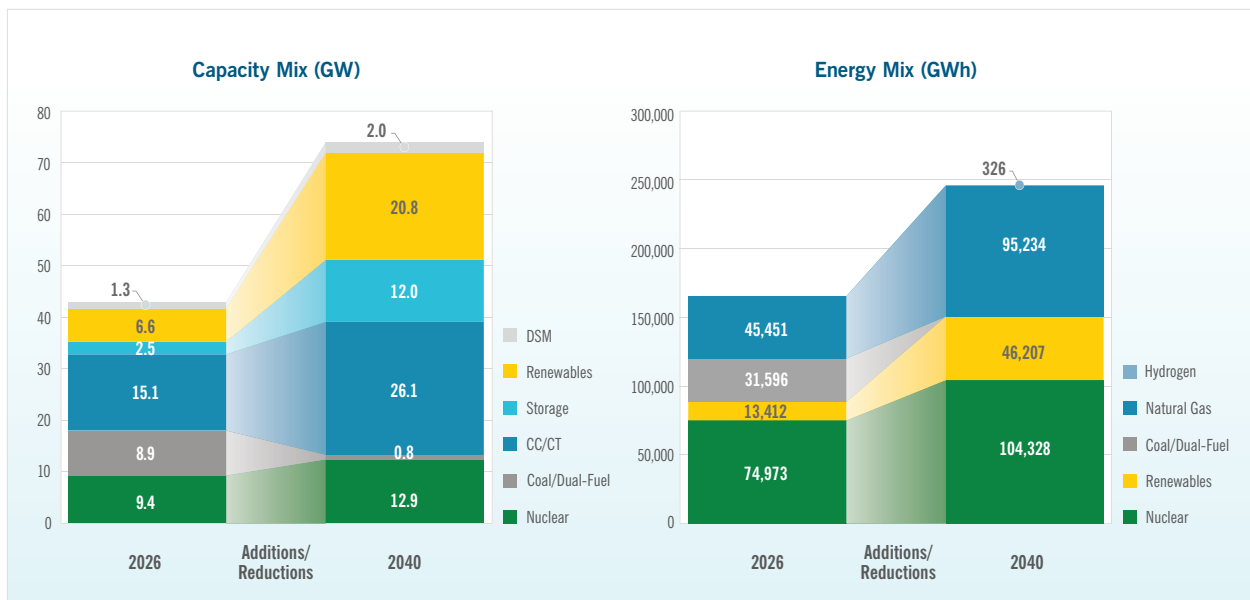


Note: Nameplate capacity additions beginning 2026, including 4,686 MW of solar and 1,040 MW of battery that are under development and included in all portfolios as forecasted resources; does not include uprates to existing resources.

reliability benefits and costs associated with the Recommended Portfolio relative to the Preliminary Base Portfolio, this analysis demonstrates that executing the recommended NTAP is a reasonable and least-cost step toward long-term carbon neutrality and reliable service for customers. Over the 15-year Base Planning Period from 2026 to 2040, the Companies are planning to increase the reliability of the system while positioning the Companies to continue to support rapid economic development and associated growth in energy consumption in the Carolinas. Over time, the Recommended Portfolio will deliver a reliable, diverse, and increasingly clean resource mix while reducing execution risks that could impact customers. Figure 8 above presents incremental resource additions made under the Recommended Portfolio by 2035 and 2040.

The Recommended Portfolio represents the current most reasonable, executable, and least-cost plan and presents a risk-adjusted strategy to meet system needs during this critical period of significant load growth and evolving federal and state policy. The Companies' modeling includes Reliability Verification, which confirms that this portfolio meets resource adequacy standards and maintains or enhances system reliability. Finally, the Recommended Portfolio confirms that actions included in the NTAP appropriately balance applicable risks (e.g., executability, cost, etc.) with the benefits of meeting growing demand and maintaining a diverse resource mix. Figure 9 below provides a snapshot of capacity and energy mix changes in the Recommended Portfolio as the system grows.

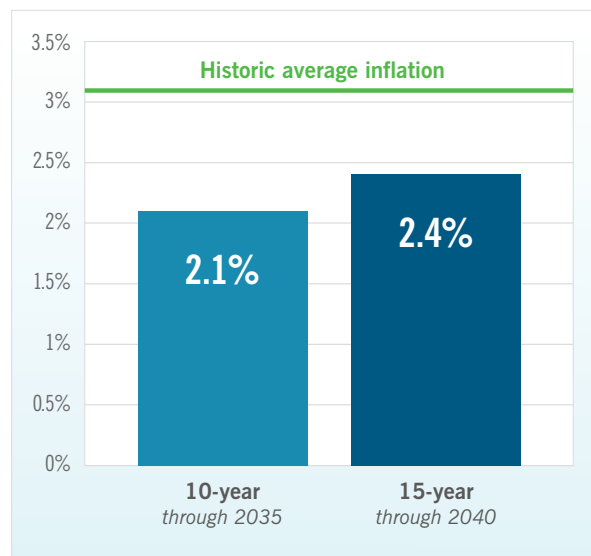
Figure 9: Recommended Portfolio Serves Growing Capacity & Energy Needs with a Diverse & Increasingly Clean Mix of Resources



In addition to risk-adjusted planning that follows a reasonable, least-cost approach to meeting system needs, the Companies carefully consider long-term cost impacts of the Plan on customers. Figure 10 below highlights the projected compound annual growth rate (“CAGR”) of customer bills under the Companies’ Recommended Portfolio. The Companies project a CAGR of between 2.1% and 2.4% over 10- and 15-year periods, which is below average general inflation. These projected bill impacts are specific to Resource Plan investments and related costs, including system fuel costs, operating and maintenance expenses, new resource capital expenditures, and certain costs associated with existing units. This excludes depreciation of existing assets, tax incentives for existing nuclear generation, and costs that are not related to resource planning activities. As part of the resource planning process, the Companies strive to keep costs as low as possible

for customers while continuing to support the Carolinas’ strong economic growth.

Figure 10: Average Bill Impact of the Recommended Portfolio



Note: Historic average inflation based on U.S. Bureau of Labor Statistics Consumer Price Index Database (1913-2024)

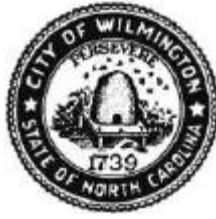


Duke Energy’s Commitment to the Carolinas

Duke Energy is privileged to have the opportunity to provide dependable electric service to the Carolinas at rates that are targeted to remain below the national average. The Companies’ legacy of dependable service is a result of balanced long-term planning that has provided a foundation for economic vitality across the region. The 2025 Carolinas Resource Plan builds

on that foundation, offering a cost-effective, forward-looking, and executable plan to meet the needs of existing and future customers with a reliable, diverse, and increasingly clean portfolio of energy resources and solutions. As the Carolinas continue to grow and evolve, Duke Energy remains steadfast in its mission to power the lives of customers for generations to come.

Resolution



City Council
City of Wilmington
North Carolina

Introduced By: Rebecca L. Hawke, City Manager

Date: 10/7/2025

Resolution Awarding a Construction Contract to J. M. Thompson Company of Cary, North Carolina for the Parks Operation Facility in the Amount of \$11,971,273

LEGISLATIVE INTENT/PURPOSE:

WHEREAS, the Parks and Recreation Department performs vital City services, including urban forestry, park and amenity maintenance, and right of way mowing, out of a City facility located at 1702 Burnett Blvd; and,

WHEREAS, the current facility has a main office that is a repurposed house originally built in 1923, which is significantly outdated and in need of replacement; and,

WHEREAS, NCDOT project U5734 will impact 1702 Burnett Blvd, necessitating the relocation of this facility to a new site; and,

WHEREAS, in 2019, the City purchased approximately 7.5 acres at the corner of River Road and Melton Road to house the new facility and, in 2021, hired Esse Architects, formerly Huffman Architects, to design the new facility; and,

WHEREAS, after completion of the design process, the City advertised the bid for construction and then received bids on July 17, 2025; and,

WHEREAS, J. M. Thompson Company of Cary, NC, had the lowest responsive, responsible bid in the amount of \$11,782,000; and,

WHEREAS, after adding amounts included in the bid submittal for Alternate 2A, Heavy Duty Paving, and Alternate 7, Rooftop Photovoltaics, and deducting the amount for value engineering items to remove the 3rd Party LEED Consultant and changes to the masonry veneer, the reconciled contract award amount is \$11,971,273.

THEREFORE, BE IT RESOLVED:

THAT, City Council hereby awards a construction contract to J. M. Thompson Company of Cary, NC, in the amount of \$11,971,273 for the construction of the new Parks Operation Facility.

THAT, the City Manager is authorized to execute a construction contract with J.M. Thompson Company for the construction of the new Parks Operation Facility.

Adopted at a _____ meeting

On _____ 2025

Bill Saffo, Mayor

Attest:

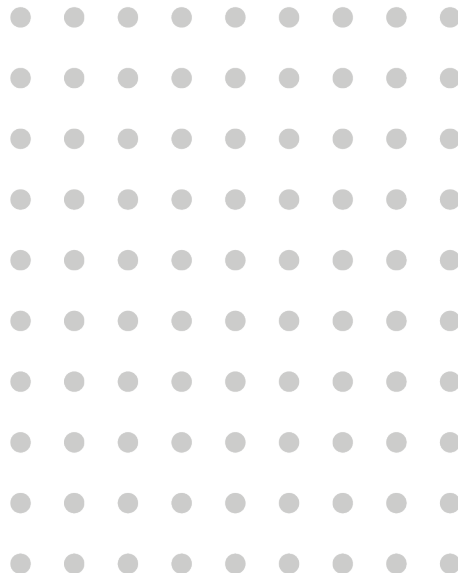
Penelope Spicer-Sidbury, City Clerk

Approved As To Availability of
Funds:

Finance Director

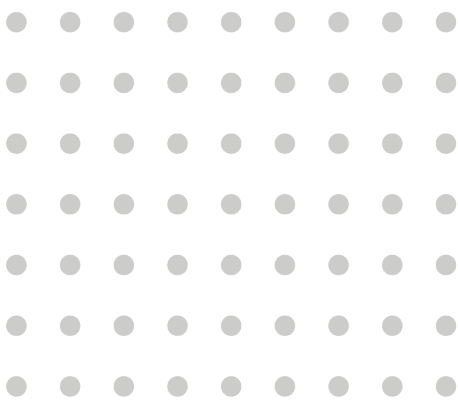
Approved As To Form:

City Attorney



MODIFIED PROGRAM GUIDE

February 2025



SolSmart – Modified Pathway Program Guide

I. Welcome to SolSmart!

Congratulations on taking action to expand opportunities for solar in your community! In the next ten years, the amount of solar energy in the U.S. is expected grow dramatically- by 2033 there is likely to be five times more solar installed than there is today!¹ By implementing solar-friendly policies, not only can you help accelerate this transition to clean energy, but you can also ensure your community is poised to take advantage of the many benefits. Becoming SolSmart designated means you are helping your residents save money, protecting natural resources, bolstering local resilience and increasing job opportunities in the clean energy sector. Through SolSmart, your county will get access to free technical assistance and learn how to implement strategies that make solar more affordable and to all residents and businesses. Your SolSmart designation will send a signal that your community is “open for solar business,” encouraging growth of local solar companies and other sustainability-minded businesses.

This guide is a comprehensive resource to help you implement solar best practices in your community and gain national recognition by earning SolSmart designation! This guide will help you to navigate the “Modified Pathway,” which is applicable to local governments, such as counties, that do not have full authority over permitting, planning, zoning and/or inspection processes. Local governments that do control these processes should refer to the SolSmart Standard Pathway Program Guide. Regional Organizations, including Regional Planning Commissions and Councils of Governments, should refer to the Regional Organization Program Guide.

The SolSmart program will connect you with solar best practices from across the country and provide clear guidance on how to implement these actions. Along the way you will receive points for the actions you take and achieve recognition as a Bronze, Silver, Gold or Platinum SolSmart-designated community! Throughout this process, our technical assistance providers are available to provide support at no cost. Please [complete this form](#) to get connected with a technical assistance provider and get started on the path to SolSmart designation.

Contents

I. [SolSmart Overview](#), pg. 2

An introduction to the SolSmart Program and the designation process.

II. [Criteria Overview](#), pg. 5

A list of SolSmart criteria organized by category.

III. [SolSmart Technical Assistance and Designation Process](#), pg. 9

A summary of the designation process and how to use the information in the guide to achieve designation.

IV. [Designation Criteria Detail and Verification Guidance](#), pg. 10

A detailed description of each SolSmart criteria with guidance and examples to assist you in implementing solar best practices and achieving points toward designation.



Recognizing Local Solar Achievements

Since 2016, over 500 communities across the U.S. have received SolSmart designation. Together, we are making solar more affordable, attaining local clean energy goals and creating jobs and opportunities for all Americans to share in the benefits of clean, renewable energy!

¹ Solar Energy Industries Association, *Solar Market Insight Report 2022 Year in Review*, March 2023, available at <https://www.seia.org/research-resources/solar-market-insight-report-2022-year-review>

II. SolSmart Overview

Across the United States, communities are increasingly using solar energy to power their homes and businesses and enjoying the benefits of clean, reliable, and affordable electricity. Rapidly declining prices for solar technologies have brought vast amounts of solar energy into the mainstream within a few short years. Homeowners, businesses, schools and local governments are using solar energy to drastically reduce their utility costs, while also reducing the environmental impact of their energy use. As natural disasters become more frequent and intense, distributed solar and energy storage is also bolstering energy resilience.

Local and regional governments play an important role in establishing policies, procedures and programs that impact solar deployment in communities. When local governments create barriers to solar in their local plans, permitting and other policies, either intentionally or unintentionally, they can hinder solar development. Alternately, when local governments provide a supportive environment for solar energy and take steps to streamline permitting, inspection and zoning processes, they expedite the installation of solar PV systems and help make it more affordable for residents and businesses.

The SolSmart program has two key components. First, the program provides no-cost technical assistance to help local governments follow national best practices to expand solar energy use in their jurisdictions. Second, it recognizes and celebrates these communities with SolSmart designations of Bronze, Silver, Gold or Platinum. SolSmart is led by the International City/County Management Association (ICMA) and the Interstate Renewable Energy Council (IREC) and is funded by the U.S. Department of Energy Solar Energy Technologies Office (SETO).

Local Policies are Important to Reducing Cost

While the cost of solar panels and equipment has decreased considerably, there are still significant opportunities to reduce “soft costs.” “Soft costs” refer to business or administrative processes that increase the time and money it takes to install a solar energy system — costs that are then passed on to customers. These include costs associated with sales and marketing, permitting processes, planning, zoning considerations, financing and a wide variety of other factors. Overall, these soft costs represent about 64% of the total cost of a solar energy system.¹

The U.S. Department of Energy’s Solar Energy Technologies Office (SETO) funds [SolSmart](#), to communities remove administrative barriers, streamline process and improve local policies in ways that further local goals and reduce solar soft costs.

¹ U.S. Department of Energy, *Soft Costs Webpage*, available at <https://www.energy.gov/eere/solar/solar-soft-costs-basics>

Designation Levels

The SolSmart program has developed a set of designation criteria based on established best practices that encourage the growth of solar energy at the local level. The criteria for the Modified Pathway are organized into five categories – Prerequisites, Planning, Government Operations, Community Engagement and Market Development. Within each category, SolSmart provides clear guidance and templates to help communities put these practices into action. Some of the criteria are prerequisites, while others are elective. Each criterion has a corresponding point value. Upon meeting the prerequisites and reaching a sufficient number of points in each category, a participant qualifies for SolSmart designation.

There are four levels of SolSmart designation for local governments. Below are the requirements for each level. Communities that earn 60% of the available points in a category are additionally eligible for special recognition.

Communities may achieve a designation and then continue to work toward higher designation levels by implementing more actions. SolSmart technical assistance is available to help communities “level up.”



Bronze	40 Total Points	3 Prerequisite Criteria
	☐ Earn 40 points in the four other categories	☐ Solar Statement (PR-1) ☐ Planning and zoning guidance (PR-2) ☐ Planning and zoning training (PR-3)
Silver	80 Total Points	2 Prerequisite Criteria
	☐ Earn 80 points in the four categories ☐ Complete bronze designation requirements*	☐ Permitting training (PR-4) ☐ Inspection training (PR-5)
Gold	150 Total Points	1 Prerequisite Criteria
	☐ Earn 150 points in the four categories ☐ Complete silver designation requirements*	☐ Post metrics (PR-6)
Platinum	200 Total Points	2 Prerequisite Criteria
	☐ Earn 200 points in the four categories ☐ Complete gold designation requirements*	☐ Engage member communities (PR-7) ☐ Model solar zoning ordinance (PR-8)

* If leveling-up to the next designation level, and your previous designation was over two years ago, you may be asked to reconfirm that prior completed actions and prerequisites are still current.

Criteria Categories

Below is a summary of each category and the types of actions that are recognized as best practices in each.

Planning (P) | 7 Criteria | 60 Points

Incorporating solar energy in local planning documents sets a vision for the integration of solar energy with other community goals including land use, economic development, housing, transportation, and the protection of historic and cultural resources, among others. Plans also provide an opportunity to identify specific targets for solar deployment and the identification of strategies to meet those targets. While community's using the modified pathway do not directly control permitting, inspection or other regulatory processes, they can create goals that relate to these processes and can help to coordinate trainings or provide resources. *Many of the criteria in the planning category can be verified by providing a link to a community's plans.*

Government Operations (GO) | 13 Criteria | 170 Points

County government can lead the way by installing solar energy on public facilities and land. Counties can engage with their local utility to discuss goals for solar energy, net metering, interconnection, and community solar. These actions are high impact that can directly lead to an increase in solar energy deployment. *Many of the criteria in the government operations category can be verified by providing documents demonstrating installed solar capacity such as news articles about solar installations, dashboards/metrics showing solar production, and contracts that demonstrate solar project construction.*

Community Engagement (CE) | 12 Criteria | 70 Points

County government can be an important and trusted source of information for residents, businesses, and solar installers. Posting information on the county government's website, providing public education, and engagement opportunities can help residents and businesses interested in solar energy make informed decisions. *Many of the criteria in the community engagement category can be verified by providing information about a community's solar energy goals, strategies and partnerships on a local county's solar webpage.*

Market Development (MD) | 10 Criteria | 155 Points

County government can collaborate and partner with organizations to promote solar development within their jurisdiction. Supporting a community solar program, promoting a solarize group-buy campaign, or partnering with a local financial institution can make solar energy more affordable for homes and businesses while improving business opportunities for solar installers. *Many of the criteria in the market development category can be verified by providing news articles about the county government's role in supporting solar development or by providing official documents that established policies or programs.*

III. Criteria Overview

The SolSmart Modified Pathway contains 50 criteria, each of which is specific action that local governments can implement to encourage solar energy development in their community. Each criterion has a corresponding point value of 5, 10 or 20. A detailed description with relevant templates, examples and resources to help you achieve each criterion is available in Section IV.

Criteria Identifier	Criteria Points	<u>Prerequisite Criteria</u>
PR-1	Req'd	Provide a document that demonstrates your county's commitment to pursue SolSmart designation. (Required for Participation)
PR-2	Req'd	Post a solar landing page on the county website with information that may include the county's solar goals, educational materials and tools that promote solar, and resources for solar development (e.g., permitting checklist and information about instant/automatic permitting like SolarAPP+, solar application forms, inspection checklist, zoning regulations, etc.). (Required for Bronze)
PR-3	Req'd	Host countywide training for planning and zoning staff on best practices in planning and zoning for solar PV. Training must have occurred in the past two years. (Required for Bronze)
PR-4	Req'd	Host countywide training on best practices for permitting solar PV and/or solar and storage systems. Training must have occurred in past two years. (Required for Silver)
PR-5	Req'd	Host countywide training on best practices for inspecting solar PV and/or solar and storage systems. Training must have occurred in the past two years. (Required for Silver)
PR-6	Req'd	Collect and post political subdivision and/or county specific energy targets for solar PV (e.g., # of installations, MW capacity, kWhs generated and/or procured) and progress against stated targets. To receive credit, counties with 10 or fewer members must collect data from at least two communities. Counties with more than 10 members must collect data from at least four communities. (Required for Gold)
PR-7	Req'd	Engage new communities in your county to participate in SolSmart and submit a Solar Statement. Potential designees are municipalities that are part of the county and have the jurisdiction required to achieve SolSmart designation. For counties with 10 or fewer communities, the county should support two new communities with joining SolSmart. For counties with more than 10 communities, the county should support four new communities with joining SolSmart. (Required for Platinum)
PR-8	Req'd	Develop and/or publicize a model solar zoning ordinance template that can be refined and adopted by member communities. (Required for Platinum)

Criteria Identifier	Criteria Points	<u>Planning Criteria</u>
P-1	5	Review existing county planning documents and identify new opportunities (not already included) to integrate solar PV and solar PV integrated with other technologies, such as battery storage or electric vehicle charging, into planning goals.
P-2	5	Draft new or updated language and provide a timeline for the inclusion of specific solar PV goals, metrics, and strategies into existing and/or future county plans.
P-3	10	Include specific solar PV goals, metrics, and strategies in the most current version of relevant county plans (e.g., energy plan, climate plan, comprehensive plan).
P-4	10	Include solar PV progress towards achieving targets in the most current published version of relevant local plans (e.g., energy plan, climate plan, comprehensive plan).
P-5	10	Collaborate with local inspection departments to develop a solar PV inspection checklist for the region and post on the solar landing page developed as part of PR-2.

P-6	10	Develop an inventory of sites suitable for large-scale solar PV within the county.
P-7	10	Provide a training for local officials on ways large-scale solar strategies can be supported in the region, including regulatory authority and relevant state processes. Training must have occurred in the past two years.

Criteria Identifier	Criteria Points	<u>Government Operations Criteria</u>
GO-1	10	Discuss countywide goals for solar PV, net metering, community solar, and/or interconnection processes with the local utility and explore areas for future collaboration.
GO-2	10	Coordinate with regional organizations and/or local governments to engage utilities on advancing solar policies such as utility procurement of solar PV, green tariffs, and/or interconnection process improvements.
GO-3	20	Demonstrate coordination between local government inspectors and utility staff to reduce Permission to Operate timeline for solar PV.
GO-4	10	Convene local inspection departments to discuss innovative inspection practices (i.e., inspection appointments, virtual inspections), and if they are feasible in the county. County to summarize results of meeting.
GO-5	10	Work with at least one community in the county to demo an instant/automatic permitting process (e.g., SolarAPP+).
GO-6	20	Work with at least one community in the county to implement an instant/automatic permitting process (e.g., SolarAPP+).
GO-7	10	Conduct feasibility analysis for solar PV on public facilities and/or publicly controlled land.
GO-8	20	Procure solar energy for direct use by the county or a county-run program or service through an offsite physical PPA, virtual PPA, green tariff, or similar structure.
GO-9	10	Install solar PV for direct use by the county or county-run program or service.
GO-10	20	Install solar PV integrated with other technologies, such as electric vehicle charging, on local government facilities and/or organization-controlled land.
GO-11	10	Install solar PV plus storage on local government facilities and/or local government-controlled land.
GO-12	10	Aggregate and publicize solar PV and storage-related details on utility interconnection processes, utility-specific resources and regulations, and state/regional regulations and incentives for member-communities to leverage. Include and regularly update details on the organization's solar landing page).
GO-13	10	Provide technical or financial support for the installation of solar PV on affordable housing, multifamily housing, community-based organizations, and/or resilience hubs.

Criteria Identifier	Criteria Points	<u>Community Engagement Criteria</u>
CE-1	5	Post online resources about solar installers and/or solar quote platforms for solar PV.
CE-2	5	Post online resources about residential and commercial solar PV financing options and incentives.
CE-3	5	Post online resources about consumer protection and solar PV.
CE-4	5	Post an online summary of state policies related to a property owner's solar access and solar rights, including links to state-level policy.
CE-5	5	Post an online summary of state policies related to Homeowner Associations (HOAs) ability to regulate and/or restrict solar PV, including links to state-level policy.
CE-6	5	Post online resources about LMI financing options and LMI Incentives.

CE-7	5	Post an online solar map for your county.
CE-8	5	Engage the community through recurring public meetings, focus groups, or other similar events around climate, energy, or sustainability plans and/or goals. Meetings should occur at minimum twice per year.
CE-9	5	Support an annual solar informational session and/or solar tour explaining solar PV opportunities and policies. Show that session/tour was made accessible to all members of the community including those in disadvantaged communities.
CE-10	10	At least annually, partner with local colleges, workforce, or economic development organizations/commissions, etc. to host renewable energy career fairs, networking events, or jobs trainings.
CE-11	5	Demonstrate county level support for local solar projects through speeches, press releases, opinion articles, etc.
CE-12	10	Discuss solar PV goals and/or strategies for increasing solar PV development, including large-scale solar plans, solar access, and/or solar adoption in disadvantaged communities, within an appropriate committee, commission, taskforce, and/or working group. (e.g., solar is a recurring agenda item during monthly sustainability commission meetings).

Criteria Identifier	Criteria Points	<u>Market Development Criteria</u>
MD-1	20	Demonstrate activity in state regulatory and/or legislative proceedings regarding solar PV.
MD-2	20	Support a community-wide group purchase program (e.g., Solarize). Program must have occurred within the last 2 years.
MD-3	10	Define and implement a pathway specifically for low-to-moderate income (LMI) residents to participate in a community-wide group purchase program through program design and/or financing support options.
MD-4	20	Support a community solar program.
MD-5	10	Define and implement a pathway specifically for low-to-moderate income (LMI) residents to participate in a community solar program through program design and/or financing support options.
MD-6	20	Provide residents with Community Choice Aggregation/Energy that includes solar PV as a power generation source.
MD-7	10	Provide a PACE financing program that includes solar PV as an eligible technology.
MD-8	20	Provide local incentives or work with a local finance institution to offer loans, rebates, grants, or other incentives for solar PV projects.
MD-9	20	Provide locally-enabled finance or work with a local finance institution to offer locally-enabled finance (e.g., a revolving loan fund) for solar PV. Financial institutions could include entities such as a local or regional bank, CDFI, or credit union).
MD-10	5	Provide or partner to provide local incentives or locally-enabled finance as described in MD-8 and MD-9 for solar PV to low-to-moderate income (LMI) households, disadvantaged communities, Disadvantaged Business Enterprises (DBEs), Minority and Women Owned Business Enterprises (MWBES), and/or non-profit organizations that provide community services.

Criteria Identifier	Criteria Points	Innovative Action Criteria
IA-1	Varies	The actions identified in the categories above represent many of the most common and impactful efforts counties are taking to make going solar easier and more affordable for residents and businesses. However, we know that counties across the country are developing innovative ways to promote and deploy solar energy. If your county has taken action that was not captured in any of the criteria above, please share it with us.
Innovative actions will be reviewed by a team of solar experts and each action may be worth up to 20 points.		
Recommended Verification: Provide a signed memo describing the innovative action and include any supporting documentation or links that provide additional details.		

IV. Solsmart Technical Assistance and Designation Process

Any local government, regardless of previous solar experience, is eligible for SolSmart designation and associated technical assistance. To request a call with a member of the SolSmart program, please [complete the contact form on SolSmart.org](#).

Once the local government decides to pursue SolSmart designation, they need to complete a [Solar Statement](#) and submit it to the SolSmart team. The Solar Statement demonstrates the community’s commitment to work with the SolSmart program and achieve designation. The county government will be connected with one of our technical assistance providers, who will work with the community to review the community’s solar goals and processes. This review helps determine how close the community is to designation and any additional technical assistance to achieve designation. The county government will work with their technical assistance provider to develop a plan, identify which criteria they will meet to achieve their desired designation level, and implement best practices in the community. Once they have completed the required actions, the local government can submit for designation using the SolSmart community web portal with the assistance of the technical assistance provider.

To earn national recognition from the SolSmart Program, a community must provide documentation of the actions it has implemented. This may include a combination of signed memos, web links, program materials, policy documents, etc. as appropriate. Section IV of this Program Guide provides a detailed description of each SolSmart criterion with resources to support implementation and guidance on documentation and verification that will be required by SolSmart.

Once the local government is ready for designation review, the submission is reviewed by the Designation Program Administrator within two weeks and the local government is notified of their designation by email.

Local governments are encouraged to celebrate and publicize their designations and to post information about SolSmart on their own websites. Many SolSmart designees have held events, shared photos and videos, and taken other actions to publicize their achievements. The designation email contains a Designation Toolkit with template press release, sample social media, and SolSmart Designation logos. SolSmart will also recognize local governments on the SolSmart website, on social media, and in the SolSmart newsletter.

Designation Pathways

There are three pathways to SolSmart designation:

Local governments that control permitting, inspection, planning, and zoning use the **Standard Pathway**.

Local governments that do not control permitting, inspection, planning, and/or zoning use the **Modified/County Pathway (as summarized in this guide)**. This pathway is appropriate for certain counties that do not have control over one or more of those processes.

Regional organizations such as regional councils or councils of government use the **Regional Organization Pathway**.

V. Criteria Detail and Verification Guidance

The SolSmart criteria are based on specific best practices that local governments and community stakeholders can implement to encourage solar energy development in their community. This section provides a detailed description of each criterion, recommended verification for designation review, community examples, templates, and/or resources.

The following provides an overview of the information that is provided for each SolSmart criterion:

Criteria Identifier	Criteria Points	Criteria Language	☐
Criterion Objective and description.			
Recommended Verification: Suggested options to verify the criterion.			
Community Examples: Examples of how an individual community has completed the criterion.			
Templates: Links to a template(s) that can help complete a criterion.			
Resources: Links to useful websites, reports, guidebooks, etc. that have up-to-date information about the topics addressed by the criterion.			

Solar Statement

PR-1	Req'd	Provide a document that demonstrates your county's commitment to pursue SolSmart designation. (Required for Participation)	☐
Counties interested in pursuing SolSmart designation must indicate their commitment to supporting solar development in their community by completing the PR-1 Solar Statement Pre-requisite. The solar statement should be signed by a representative of the local government. It is preferred that the statement is signed by a Department executive or an elected official, but it does not need to go through an official approval process. The solar statement demonstrates your community's commitment to pursue SolSmart designation. If possible, please place the solar statement on your local government's letterhead. While the PR-1 is a commitment to the program, the best practices included in the template provided are goals to strive for and non-binding to the criteria you can pursue. The solar statement should address the items listed in the bullets below. The statement does not need to be more than one page in length.			
Recommended Verification: - Provide a signed solar statement that includes: - A commitment to participate in the SolSmart designation process - A statement of solar goals, areas of focus or community priorities (e.g., streamlining the permitting process or supporting a non-profit led solar initiative) - A statement of support for solar development to be inclusive and equitable for all residents - Past achievements or programs related to solar PV and/or renewable energy - A commitment to tracking metrics related to solar PV and/or provide a benchmark of available solar metrics (e.g., the number of installed systems, capacity, growth in residential installations, etc.) - A commitment of staff time and resources to improve the local market for solar PV			
Community Examples: Hilliard, OH SolSmart Silver Hopkins, MN SolSmart Bronze Madison, NJ SolSmart Bronze			
Templates: SolSmart Solar Statement Template SolSmart			

Prerequisites Criteria

PR-2	Req'd	Post a solar landing page on the county website with information that may include the county's solar goals, educational materials and tools that promote solar, and resources for solar development (e.g., permitting checklist and information about instant/automatic permitting like SolarAPP+, solar application forms, inspection checklist, zoning regulations, etc.). (Required for Bronze)	☐
A solar landing page is a way to provide residents, businesses, and solar installers with important information about your county's solar energy policies, processes, goals, and metrics from one centralized location. It is also a way to educate community members about solar energy topics like financing options and consumer protection best practices. Information and resources posted should be made available in multiple languages, as appropriate for your community, and should be available to community members in print form if requested.			
Recommended Verification Provide a link to the solar landing page.			
Community Examples: Pulaski County, VA SolSmart Gold Blair County, ID SolSmart Gold Wood County, WI SolSmart Gold			
Templates: SolSmart Solar Landing Page Template SolSmart			
Resources: Homeowner's Guide to Going Solar (View in Spanish) U.S. Department of Energy (DOE) Residential Consumer Guide to Solar Power Solar Energy Industries Association (SEIA)			
PR-3	Req'd	Host countywide training for planning and zoning staff on best practices in planning and zoning for solar PV. Training must have occurred in the past two years. (Required for Bronze)	☐
Regular solar PV training is a best practice to ensure planning and zoning staff are up-to-date on strategies for incorporating solar into plans, ordinances, and development regulations. Training staff in planning and zoning best practices for solar can help them to evaluate the options available for reducing barriers to solar and enable them to customize these best practices to their local context. Training can help staff develop clear, transparent, well-defined, and consistent planning and zoning regulations and processes that provide certainty for property owners and solar developers. Counties can host full or half-day workshops for staff within their jurisdiction (either live or online) and provide or create resources designed to help staff keep up with advances in solar planning and zoning best practices. Communities who attend a county-hosted training can earn points toward their own SolSmart designation.			
Recommended Verification: Provide a signed memo with details about the training including name of training, name of trainer, attendees (name, title, department, affiliation), date and time, location, agenda, and presentation/slides.			
Templates: SolSmart Training Verification Memo SolSmart			
Resources: Best Practices in Solar Planning and Zoning SolSmart Webinar Planning for Solar Energy American Planning Association (APA) Planning, Zoning & Development SolSmart's Toolkit for Local Governments Solar@Scale Webinar Series, Session 5 ICMA and APA SolSmart Training Videos Catalog SolSmart			

PR-4	Req'd	Host countywide training on best practices for permitting solar PV and/or solar and storage systems. Training must have occurred in past two years. (Required for Silver)	☐
Regular solar PV training is a best practice to ensure permit technicians and plan reviewers are up-to-date on new procedures, codes, and products within the solar industry. Trainings increase staff knowledge of solar energy systems and ensures they know the best procedures for permit application review and processing to ensure applications and supporting documents are compliant with building and electrical codes. Increased staff knowledge can improve processing efficiency, thereby reducing demands on staff time and resources. Training should include details on automatic permit approval technologies of residential rooftop solar PV systems (e.g., using SolarAPP+). Counties can host full or half-day workshops for staff within their jurisdiction (either live or online) and provide resources designed to help keep staff informed about advances in solar and storage technologies.			
Recommended Verification: Provide a signed memo with details about the inspection training including name of training, name of trainer, attendees (name, title, department, affiliation), date and time, location, agenda, and presentation/slides.			
Community Example: Delaware Valley Regional Planning Commission SolSmart Bronze			
Templates: SolSmart Training Verification Memo SolSmart			
Resources: Permitting Training Module 1 IREC Solar PV Structural Plan Review Permitting Training Module 2 IREC Solar PV Electrical Plan Review Permitting Training Module 3 IREC Solar PV Plan Review Test Solar + Storage, A Guide for Local Governments SolSmart Webinar			

PR-5	Req'd	Host countywide training on best practices for inspecting solar PV and/or solar and storage systems. Training must have occurred in the past two years. (Required for Silver)	☐
Regular solar PV training, at least every few years, is a best practice to ensure field inspectors are up-to-date on new procedures, codes, and products within the solar industry. Trainings increase staff knowledge of solar energy systems and ensures they know the best procedures for field inspections to ensure compliance with applicable state and local building and electrical codes. Increased staff knowledge can improve inspection efficiency, thereby reducing demands on staff time and resources. Training should include details on virtual, photo, or another innovative inspection practice with solar and/or solar plus storage. Counties can host full or half-day workshops for staff within their jurisdiction (either live or online) and provide resources designed to help keep staff informed about advances in solar and storage technologies.			
Recommended Verification: Provide a memo with details about the inspection training including name of training, name of trainer, attendees (name, title, department, affiliation), date and time, location, agenda, and presentation/slides.			
Community Examples: North Central Texas Council of Governments SolSmart Bronze Metropolitan Council SolSmart Gold			
Templates: SolSmart Training Verification Memo SolSmart			
Resources: Solar PV Field Inspection Basics - Series Interstate Renewable Energy Council (IREC) Solar + Storage, A Guide for Local Governments SolSmart Webinar SolSmart Training Videos Catalog SolSmart			

PR-6	Req'd	Collect and post political subdivision and/or county specific energy targets for solar PV (e.g., # of installations, MW capacity, kWhs generated and/or procured) and progress against stated targets. To receive credit, counties with 10 or fewer members must collect data from at least two communities. Counties with more than 10 members must collect data from at least four communities. (Required for Gold)	☐
County governments can provide additional capacity and support to member governments related to data collection and tracking. Key solar metrics such as the number of installations and total installed capacity can help communicate progress towards local and state renewable energy goals. Other related metrics could include the percentage of municipal energy provided by solar energy, installed capacity per capita and progress towards greenhouse gas emissions targets.			
Recommended Verification: Provide a link to a webpage displaying solar PV metrics, the date of when metric tracking began, and the date the information was last updated			
Community Examples: Boulder, CO SolSmart Gold Westminster, CO SolSmart Gold			
Templates: SolSmart Solar Landing Page Template SolSmart			

PR-7	Req'd	Engage new communities in your county to participate in SolSmart and submit a Solar Statement. Potential designees are municipalities that are part of the county and have the jurisdiction required to achieve SolSmart designation. For counties with 10 or fewer communities, the county should support two new communities with joining SolSmart. For counties with more than 10 communities, the county should support four new communities with joining SolSmart. (Required for Platinum)	☐
Counties can help to support member communities by introducing them to SolSmart and helping them seek designation themselves. Counties can help facilitate designation by creating models and templates that member communities can use as they adopt best practices and meet SolSmart criteria. Coordinated action can create even greater opportunities to support a strong solar market and drive down costs across a county.			
Recommended Verification: Signed Solar Statements (Standard Pathway PR-1) from member communities.			
Templates: SolSmart Solar Statement Template SolSmart			

PR-8	Req'd	Develop and/or publicize a model solar zoning ordinance template that can be refined and adopted by member communities. (Required for Platinum)	☐
A county interested in enabling solar energy development should publish a locally relevant model zoning ordinance, by including basic solar information in the zoning ordinance such as a purpose, definitions, clarification on accessory use and primary use solar, and use standards. Zoning codes that contain no or little information about solar energy can complicate the process for homes and business that want to install a solar energy system. Including basic information about solar energy improves transparency of processes and clarity of development requirements and can enhance the growth of the local solar market in an organized and efficient manner.			
Recommended Verification: Link to model solar zoning ordinance on solar landing page.			
Community Examples: Delaware Valley Regional Planning Commission SolSmart Bronze North Central Texas Council of Governments SolSmart Bronze			
Resources: Best Practice Guidance for Solar and Zoning – Accessory Use SolSmart Model Zoning for the Regulation of Solar Energy Systems Massachusetts Department of Energy Resources Solar Model Ordinance Grow Solar Toolkit Template Solar Energy Development Ordinance for North Carolina North Carolina Clean Energy Technology Center (NCCETC) Best Practices in Zoning for Solar National Renewable Energy Laboratory (NREL)			

Planning

P-1	5	Review existing county planning documents and identify new opportunities (not already included) to integrate solar PV and solar PV integrated with other technologies, such as battery storage or electric vehicle charging, into planning goals.	☐
Counties should consider opportunities to integrate solar PV and other technologies into other applicable planning processes. Organizations should review transportation, climate, land use, economic development, and other plans to consider how solar can be included to support all of the organization's planning efforts.			
Recommended Verification: Signed memo summarizing opportunities and next steps			
Resources: Best Practices in Solar Planning and Zoning SolSmart Webinar Planning for Solar Energy American Planning Association (APA) Planning, Zoning & Development SolSmart's Toolkit for Local Governments			
P-2	5	Draft new or updated language and provide a timeline for the inclusion of specific solar PV goals, metrics, and strategies into existing and/or future county plans.	☐
Planning documents provide the foundation for a community's vision for how and where it would like future development to occur. Development is governed largely by the components of the comprehensive plan and guided by the policies and strategies outlined in other functional plans such as a Climate Action Plan or Sustainability Plan. These planning documents should align to have solar energy goals, metrics, and strategies that promote solar development in an organized and efficient manner.			
Recommended Verification: Provide draft language of the proposed plan changes that relate to solar energy and a timeline for inclusion in future plans.			
Community Examples: Chatham County, NC SolSmart Gold			
Resources: Integrating Solar Energy into Local Plans American Planning Association (APA) Planning for Solar Energy American Planning Association (APA) Planning, Zoning & Development SolSmart's Toolkit for Local Governments			
P-3	10	Include specific solar PV goals, metrics, and strategies in the most current version of relevant county plans (e.g., energy plan, climate plan, comprehensive plan).	☐
Counties should utilize the work of P-2 and ensure that the goals, metrics and strategies they have drafted are fully integrated into the appropriate plans.			
Recommended Verification: Provide a link to the relevant plans that incorporate solar PV goals, metrics, and/or strategies. Please indicate the relevant section(s).			
Community Examples: Washington County, MN Not designated			
Resources: Integrating Solar Energy into Local Plans American Planning Association (APA) Local Government Strategies for 100% Clean Energy SolSmart Webinar Planning for Solar Energy American Planning Association (APA) Planning, Zoning & Development SolSmart's Toolkit for Local Governments SLOPE State and Local Planning for Energy NREL			

P-4	10	Include solar PV progress towards achieving targets in the most current published version of relevant local plans (e.g., energy plan, climate plan, comprehensive plan).	☐
Publicly reporting progress toward solar goals helps to create transparency and accountability. These metrics allow local governments to see the impacts of their policies and identify the need to adjust their strategies. To be meaningful, metrics must be updated annually at a minimum, but communities should strive for quarterly updates.			
Recommended Verification: Provide a link to this information posted on the organization's website or solar landing page. Please specify the reporting period for which the reported metrics apply and date they were last updated			
Community Examples: Ramsey County, MN SolSmart Bronze Arlington County, VA SolSmart Bronze			
Resources: Integrating Solar Energy into Local Plans American Planning Association (APA) Local Government Strategies for 100% Clean Energy SolSmart Webinar Planning for Solar Energy American Planning Association (APA) Planning, Zoning & Development SolSmart's Toolkit for Local Governments			
P-5	10	Collaborate with local inspection departments to develop a solar PV inspection checklist for the region and post on the solar landing page developed as part of PR-2.	☐
Counties can support member-communities and their inspection departments, facilitating development of a uniform county-wide inspection checklist tailored to the preferences of member-communities and adapted to suit the local landscape. Including inspection staff in the development process and making this resource available via the County's solar landing page can ensure all communities have access to a template inspection checklist regardless of their SolSmart status.			
Recommended Verification: Provide a link to the inspection checklist and documentation that the resource has been shared with communities in the region, such as a newsletter, email, meeting minutes, etc.			
Community Examples: Delaware Valley Regional Planning Commission SolSmart Bronze Michiana Area Council of Governments SolSmart Bronze North Central Texas Council of Governments SolSmart Bronze			
Templates: SolSmart Energy Storage Field Inspection Checklist Template SolSmart			
Resources: Solar PV Systems: Job Aids for a Consistent Plan Review Process Interstate Renewable Energy Council (IREC) California Solar Permitting Guidebook (4th Edition) (pg. 22-24) Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained Interstate Renewable Energy Council (IREC) Solar PV Construction: Codes, Permitting, and Inspection SolSmart's Toolkit for Local Governments			
P-6	10	Develop an inventory of sites suitable for large-scale solar PV within the county.	☐
Counties can proactively identify sites in the county that are favorable for solar PV projects. Identifying sites that have high solar potential and the best characteristics for large-scale solar development can reduce potential conflicts between solar and other land uses, enable member-communities to incorporate large-scale solar development into their future plans, and speed up the project development timeline. These inventories do not need to include every potential site, but may focus on a particular type or scale or project, a portion of the region, etc. as is most meaningful and valuable to the county.			
Recommended Verification: Provide a link to the large-scale solar PV analysis inventory conducted for the county.			
Community Examples: North Central Texas Council of Governments SolSmart Bronze			

Resources:

- [Solar Development on Public Facilities and Under-Utilized Land](#) | SolSmart's Toolkit for Local Governments
- [Decision Support Tools for Local Solar Planning and Development](#) | SolSmart Webinar
- [Solar Project Development Pathway- Site and Opportunity Assessment](#) | U.S. Environmental Protection Agency (EPA)
- [System Advisor Model \(SAM\)](#) | National Renewable Energy Lab (NREL)

P-7	10	Provide a training for local officials on ways large-scale solar strategies can be supported in the region, including regulatory authority and relevant state processes. Training must have occurred in the past two years.	☐
Large-scale solar projects are unique in many ways and require specific strategies to facilitate implementation. Local officials can benefit from training that helps explain the design and development process for large-scale solar projects, clarifies regulatory roles and responsibilities, and provides strategies that build support for large-scale solar projects by maximizing local benefits.			
Recommended Verification: • Provide a memo with details about in-person training including name of training, name of trainer, attendees (name, title, department, affiliation), date and time, location, agenda, and presentation/slides. • Provide a link to online training posted to a public streaming platform or the organization's solar landing page.			
Templates: • SolSmart Training Verification Memo SolSmart			
Resources: • Solar@Scale Guidebook ICMA and APA • Solar@Scale Webinar Series ICMA and APA			

Government Operations

GO-1	10	Discuss countywide goals for solar PV, net metering, community solar, and/or interconnection processes with the local utility and explore areas for future collaboration. Compile summary and next steps in a memo.	☐
Local governments can leverage their relationship with electric utilities to encourage increased support for, and development of, solar energy. Local governments and utilities can partner to provide community solar programs, solar incentives, and help improve the solar interconnection process. Utilities can also help local governments meet municipal or community-wide renewable energy goals by procuring large amount of solar energy. Please note that conversations cannot include docketed proceedings that the utility is currently engaged in with the state regulatory commission.			
Recommended Verification: Signed memo summarizing include number and dates of meetings, parties present, general agendas, and outcomes from the meetings.			
Community Examples: Missoula, MT SolSmart Silver			
Resources: Engagement Guidance American Cities Climate Challenge Renewables Accelerator Making Solar & Electrification Policies Mutually Beneficial SolSmart Webinar Procurement Guidance American Cities Climate Challenge Renewables Accelerator Solar & Electrification, A Beneficial Partnership SolSmart Issue Brief Utilizing City-Utility Partnership Agreements to Achieve Climate and Energy Goals World Resources Institute (WRI)			
GO-2	10	Coordinate with regional organizations and/or local governments to engage utilities on advancing solar policies such as utility procurement of solar PV, green tariffs, and/or interconnection process improvements.	☐
Local governments can find strength in numerous as they advance ambitious energy transformation goals. Collaborating with other local governments and/or regional organizations allows resources, expertise, and staff to be pooled together which can enhance efforts to work with utilities. Networks of communities and utilities can provide opportunities to share best practices and common strategies through peer-to-peer learning. They can also help build coalitions and advocate for state policy.			
Recommended Verification: Provides details about your community's participation in coordinated efforts between local governments and/or regional organizations to engage utilities with the goal of advancing solar initiatives.			
Community Examples: Salt Lake City, UT SolSmart Bronze			
Resources: Engagement Guidance American Cities Climate Challenge Renewables Accelerator Engagement Tracker American Cities Climate Challenge Renewables Accelerator PJM Cities & Communities Coalition World Resources Institute (WRI) Procurement Guidance American Cities Climate Challenge Renewables Accelerator Utilizing City-Utility Partnership Agreements to Achieve Climate and Energy Goals World Resources Institute (WRI)			
GO-3	20	Demonstrate coordination between local government inspectors and utility staff to reduce Permission to Operate timeline for solar PV.	☐
A solar system that has not been granted permission to operate (PTO), is not allowed to produce electricity which can have economic impacts for the system owner. To reduce economic loss, local governments can coordinate with the electric utility to ensure solar PV systems can begin operation as soon as it has been confirmed that the systems are properly constructed and connected to the grid. Consolidating and/or coordinating local government inspections and utility interconnection inspections can save time and money for solar installers and property owners.			

Recommended Verification: Provide details about the coordination process and explaining how this process reduces the time between inspection and Permission to Operate	
Community Examples: Leon County, FL SolSmart Gold	
Resources: Utility Engagement SolSmart's Toolkit for Local Governments	

GO-4	10	Convene local inspection departments to discuss innovative inspection practices (i.e., inspection appointments, virtual inspections), and if they are feasible in the county. County to summarize results of meeting.	☐
Ensuring an effective and expedient inspection process can reduce project costs. Host a meeting of member communities to discuss implementing virtual, photo, or another innovative inspection practice with solar and/or solar plus storage. Discuss what types of projects (e.g., residential, installations under a certain size, etc.) would qualify for virtual or photo inspections and available resources.			
Recommended Verification: Provide a signed memo with details about the innovative inspection meeting including names of organizer/presenters, attendees (name, title, department, community), date and time, location, agenda, and presentation/slides.			
Community Examples: Tampa, FL SolSmart Bronze County of Los Angeles Not designated			
Resources: Construction Photo Resource NY-Sun Inspection Guide for PV Systems For One- and Two- Family Dwellings County of Los Angeles			

GO-5	20	Work with at least one community in the county to demo an instant/automatic permitting process (e.g., SolarAPP+).	☐
Most residential solar systems are simple and standardized, but the high volume of applications can be time consuming for local permitting departments. Online automated platforms (e.g., SolarAPP+) offer a convenient and efficient way to manage solar permitting. These platforms can help local governments to stay up to date with relevant codes, catch errors, improve communication with applicants, accelerate approval for standardized PV systems, and improve record keeping. The county can help identify communities that might be interested in adopting instant/automatic permitting and help them learn more.			
Recommended Verification: Signed memo that includes date, attendees, presenter, summary of discussion topics and next steps			
Community Examples: Pima County, AZ SolSmart Gold Sacramento County, CA SolSmart Gold Sonoma County, CA SolSmart Gold			
Templates: SolSmart Training Verification Memo SolSmart			
Resources: Register for SolarAPP+ National Renewable Energy Laboratory (NREL) SolarAPP+ Communities National Renewable Energy Laboratory (NREL) SolarAPP+ Performance Case Studies National Renewable Energy Laboratory (NREL)			

GO-6	20	Work with at least one community in the county to implement an instant/automatic permitting process (e.g., SolarAPP+).	☐
Communities that move forward with the implementation of an instant-automatic permitting processes may benefit from the support of their county government. Counties help garner stakeholder support for adopting instant permitting, facilitate onboarding calls between communities and the software team, help answer questions and overcome any challenges that arise.			
Recommended Verification: Signed memo describing how the county provided support during the implementation of instant/automatic permitting			
Community Examples: Pima County, AZ SolSmart Gold Sacramento County, CA SolSmart Gold Sonoma County, CA SolSmart Gold			
Templates: SolSmart Training Verification Memo SolSmart			
Resources: SolarAPP+ Benefits National Renewable Energy Laboratory (NREL) Register for SolarAPP+ National Renewable Energy Laboratory (NREL) SolarAPP+ Communities National Renewable Energy Laboratory (NREL) SolarAPP+ Performance Case Studies National Renewable Energy Laboratory (NREL)			

GO-7	10	Conduct feasibility analysis for solar PV on public facilities and/or publicly controlled land. Compile summary and next steps in a memo.	☐
Local governments can lead by example and install solar PV on their facilities and/or land to achieve clean energy goals and generate electricity cost savings. The first step is conducting a feasibility analysis to discover which rooftops or grounds have the highest solar potential and best characteristic for a solar installation. An RFP can then be issued for the most favorable sites. An county that receives GO-9, GO-10 or GO-11 may also qualify for GO-7 if they completed a feasibility analysis as part of the project development process.			
Recommended Verification: Provide a link to the feasibility analysis or details about the feasibility analysis that was conducted – who conducted, what were the sites, when was it conducted, what were the recommendations and next steps.			
Community Examples: Asheville, NC SolSmart Gold Mountain Iron, MN SolSmart Bronze			
Resources: Decision Support Tools for Local Solar Planning & Development SolSmart Webinar Solar Development on Public Facilities and Under-utilized Land SolSmart's Toolkit for Local Governments System Advisor Model (SAM) National Renewable Energy Laboratory (NREL) Geospatial Energy Mapper (GEM) Argonne National Lab			

GO-8	20	Procure solar energy for direct use by the county or a county-run program or service through an offsite physical PPA, virtual PPA, green tariff, or similar structure.	☐
To meet climate and energy goals, local governments can procure a large amount of solar energy through an appropriate structure, depending on the types of contracts allowed by state and utility regulations.			
Recommended Verification: Provide a document such as a news article, contract, press release, or similar official document containing the details how the local government is procuring solar energy.			
Community Examples: Fairfax County, VA SolSmart Gold Dane County, WI SolSmart Platinum			

Resources:		• How Cities Benefit from Power Purchase Agreements Center for Climate and Energy Solutions (C2ES) • How Local Governments Can Buy Renewable Energy & Support Market Development SolSmart Webinar • Local Government Strategies for 100% Clean Energy SolSmart Webinar • Procurement Guidance American Cities Climate Challenge Renewables Accelerator • Municipal Solar Procurement SolSmart Webinar • Solar Power Purchase Agreements: A Toolkit for Local Governments Interstate Renewable Energy Council (IREC)
-------------------	--	--

GO-9	10	Install solar PV for direct use by the county or county-run program or service.	☐
Counties can lead by example and install solar on their facilities and/or land to achieve clean energy goals. Solar installations can generate revenue for local governments, deliver electricity cost savings, and serve as an educational tool for community members. Counties are encouraged to install solar at highly visible locations to maximize the educational value.			
Recommended Verification: • Provide news articles, a press release announcing the commissioned system, or webpage that summarizes the details of the installation(s) including total number of systems, size, location, visibility and photos.			
Community Examples: • Johnson County, IA SolSmart Gold • New York City, NY SolSmart Gold			
Resources: • Procurement Guidance American Cities Climate Challenge Renewables Accelerator • Solar Decision Support and Resources for Local Governments National Renewable Energy Laboratory (NREL) • Solar Development on Public Facilities and Under-utilized Land SolSmart's Toolkit for Local Governments • Solar Power Purchase Agreements: A Toolkit for Local Governments Interstate Renewable Energy Council (IREC)			

GO-10	20	Install solar PV integrated with other technologies, such as electric vehicle charging, on local government facilities and/or organization-controlled land.	☐
Solar can provide unique benefits when paired with other distributed energy technologies. Co-locating solar with other technologies can improve resilience, provide demand-charge reductions, and charging electric vehicles with a renewable source of energy.			
Recommended Verification: • Provide a news article, a press release announcing the commissioned system, or webpage that summarizes the details of the solar installation(s) plus storage including total number of systems, size, location, and photos.			
Community Examples: • Duluth, MN SolSmart Gold • Montgomery County, MD SolSmart Gold • Boulder, CO SolSmart Gold			
Resources: • Best Practices for Solar & Electric Bus Charging at Transit Agencies SolSmart Webinar • REopt: Renewable Energy Integration & Optimization National Renewable Energy Laboratory (NREL) • Solar & Electric Vehicles, A Guide for Local Governments SolSmart • Solar & Electric Vehicle Best Practices for Local Governments SolSmart Webinar • Solar and Energy Storage for Resiliency (Solar Resilient) San Francisco Department of the Environment • Solar and Resiliency: Integrative Financing Strategies for SolSmart Communities SolSmart Issue Brief			

GO-11	10	Install solar PV plus storage on local government facilities and/or local government-controlled land.	☐
Solar can provide resilience benefits and serve as emergency backup power to local government facilities in case of a power outage. Local governments have leveraged solar PV and storage to provide lighting for evacuation routes, power to shelters, and extend the fuel supply of diesel generation. Solar plus storage can also be used to provide demand-charge reductions by reducing peak load.			
Recommended Verification: Provide a news article, a press release announcing the commissioned system, or webpage that summarizes the details of the solar installation(s) plus storage including total number of systems, size, location, and photos.			
Community Examples: Fayetteville, AR SolSmart Gold Portland, OR Not Designated			
Resources: REopt: Renewable Energy Integration & Optimization National Renewable Energy Laboratory (NREL) Resiliency: Solar + Storage SolSmart's Toolkit for Local Governments Solar + Storage: A Guide for Local Governments SolSmart Issue Brief Solar and Energy Storage for Resiliency (Solar Resilient) San Francisco Department of the Environment Solar and Resiliency: Integrative Financing Strategies for SolSmart Communities SolSmart Issue Brief Solar + Storage / Resiliency Sustainable CUNY Smart Distributed Generation Hub			
GO-12	10	Aggregate and publicize solar PV and storage-related details on utility interconnection processes, utility-specific resources and regulations, and state/regional regulations and incentives for member-communities to leverage. Include and regularly update details on the organization's solar landing page).	☐
Counties can play a valuable role in researching and compiling information about policies, regulations, and incentives from utility and state entities related to solar PV and storage. Counties can help make this information readily available to member communities and ensure the information is kept current.			
Recommended Verification: Provide a link to relevant information on the solar landing page.			
Templates: SolSmart Solar Landing Page Template SolSmart			
GO-13	10	Provide technical or financial support for the installation of solar PV on affordable housing, multifamily housing, community-based organizations, and/or resilience hubs.	☐
Counties can partner with community-serving organizations, housing developers and managers of resilience hubs to support the implementation of solar. Counties may be able to offer technical support if they have relevant expertise for example in project development, energy or project finance. In other instances, counties may be able to offer direct financial support to these projects.			
Recommended Verification: Provide links and/or a signed memo outlining the support provided.			
Community Example: Hillsborough County Not designated			
Resources: Process Guide for City-Community Collaboration Greenlink Analytics Clean Energy for Low Income Communities Accelerator Toolkit U.S. Department of Energy Better Buildings The Inflation Reduction Act: What does it mean for Affordable Housing (webinar) Enterprise Community Partners			

Community Engagement

CE-1	5	Post online resources about solar installers and/or solar quote platforms for solar PV.	☐
More solar companies operating in your community means residents and businesses are faced with more choices as they consider who to select for their solar project. Providing relevant local information on active solar installers can help community members make the best choice given their circumstances. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.			
Recommended Verification: Provide a link to the relevant information on the solar landing page.			
Community Examples: Denver, CO SolSmart Gold Schaumburg, IL SolSmart Silver			
Templates: SolSmart Solar Landing Page Template SolSmart			
Resources: Board Certified Professionals Directory North American Board Certified Energy Practitioners (NABCEP) EnergySage EnergySage Pickmysolar Pick My Solar Solar Buyer's Markets: Unlocking Lower Photovoltaic and Battery Prices on Online Quote Platforms National Renewable Energy Laboratory (NREL)			
CE-2	5	Post online resources about residential and commercial solar PV financing options and incentives.	☐
Many different financing options are available for residential and commercial solar PV. Counties can play an important role in providing access to information about available options. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.			
Recommended Verification: Provide a link to the relevant information on the solar landing page.			
Community Examples: Metropolitan (Met) Council, MN SolSmart Gold Wood County, WI SolSmart Gold			
Templates: SolSmart Solar Landing Page Template SolSmart			
Resources: A Homeowner's Guide to Solar Financing: Leases, Loans and PPAs Clean Energy States Alliance (CESA) Database of State Incentives for Renewables and Efficiency (DSIRE) North Carolina Clean Energy Technology Center (NCCETC) Financing your solar panel system EnergySage Homeowner's Guide to the Federal Tax Credit for Solar Photovoltaics (View in Spanish) U.S. Department of Energy (DOE)			
CE-3	5	Post online resources about consumer protection and solar PV.	☐
Solar energy can be a new and complex topic for community members. Local governments can provide online guides and resources to help community members have a clear understanding of solar PV, allowing them to make informed decisions. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.			
Recommended Verification: Provide a link to the relevant information on the solar landing page.			

Community Examples: • Alexandria, VA SolSmart Gold • James City County, VA SolSmart Bronze	
Templates: • SolSmart Solar Landing Page Template SolSmart	
Resources: • Consumer Solar Checklist Interstate Renewable Energy Council (IREC) • EnergySage EnergySage • Residential Issues and Existing Regulatory Framework SolSmart's Toolkit for Local Governments • Solar Customer Resource Portal Solar Energy Industries Association (SEIA) • Solar Owner's Manual Solar United Neighbors (SUN)	

CE-4	5	Post an online summary of state policies related to a property owner's solar access and solar rights, including links to state-level policy.	☐
Community members are often unaware that state policy could impact their property's solar rights. Solar rights and solar access are terms which describe the ability of property owners to utilize sunlight on their property. Each state has its own unique policy and enforcement regime. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.			
Recommended Verification: • Provide a link to the summary on the solar landing page.			
Community Examples: • Michiana Area Council of Governments SolSmart Bronze • Torrance, CA SolSmart Gold • Wilmette, IL SolSmart Silver			
Templates: • SolSmart Solar Landing Page Template SolSmart			
Resources: • Homeowners Associations and Solar Access Solar United Neighbors • Database of State Incentives for Renewables and Efficiency (DSIRE) North Carolina Clean Energy Technology Center (NCCETC)			

CE-5	5	Post an online summary of state policies related to Home Owner Associations (HOAs) ability to regulate and/or restrict solar PV, including links to state-level policy.	☐
Homeowner Associations often aim to impose restrictive measures on solar PV systems. Community members should be aware of state policy that defines what HOAs are allowed and not allowed to do in terms of regulating solar PV systems. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.			
Recommended Verification: • Provide a link to a webpage with the summary on state policies relating to Homeowner Associations and solar PV.			
Community Examples: • Hallandale Beach, FL SolSmart Silver • Torrance, CA SolSmart Gold			
Templates: • SolSmart Solar Landing Page Template SolSmart			
Resources: • Homeowners Associations and Solar Access Solar United Neighbors			

CE-6	5	Post online resources about for low-to-moderate income (LMI) financing options and LMI incentives.	☐
Some low-to-moderate income (LMI) financing options may be available for residential and commercial solar PV in your county or state. Counties can play an important role in providing access to information about available options. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.			
Recommended Verification: Provide a link to a webpage that contains information about low-to-moderate income (LMI) financing options and LMI incentives.			
Templates: SolSmart Solar Landing Page Template SolSmart			
Resources: Resources to Support Initiatives for Low-to-Moderate Income Communities SolSmart Webinar Projects & Programs in Low-to-Moderate Income Communities SolSmart Webinar Unlocking Solar for Low- and Moderate-Income Residents: A Matrix of Financing Options by Resident, Provider, and Housing Type National Renewable Energy Laboratory (NREL)			

CE-7	5	Post an online solar map for your county.	☐
Solar maps can be a helpful and visual way to communicate solar potential to community members. Solar maps can be customized depending on the goals and needs of the community. For example, solar maps can provide community members with an estimate of the solar potential of their rooftop, they can be used the location of solar installations within a community (which may help residents understand the extent of solar projects happening in different parts of the community), or they may be used to communicate the potential for different solar installations (i.e., residential, commercial, large-scale, community solar, etc.).			
Recommended Verification: Provide a link to the solar map for your community.			
Community Examples: Los Angeles County, CA Not Designated Centre Region Council of Governments SolSmart Gold Ohio-Kentucky-Indiana Regional Council of Governments SolSmart Gold			
Templates: SolSmart Solar Landing Page Template SolSmart			
Resources: Go Solar Ready Ohio-Kentucky-Indiana Regional Council of Governments NY Solar Map Sustainable CUNY Smart Distributed Generation Hub Project Sunroof Google			

CE-8	5	Engage the community through recurring public meetings, focus groups, or other similar events around climate, energy, or sustainability plans and/or goals. Meetings should occur at minimum twice per year.	☐
An engaged and informed community can encourage solar market growth and increase the likelihood that local homes and businesses will pursue solar installations. Public meetings, focus groups, and other events related to climate energy and sustainability are ways to engage community members. These meetings can be an opportunity to educate the public about opportunities for solar as well as get input on potential solar strategies, identify goals and discuss progress.			
Recommended Verification: Provide a link(s) to details about the meeting or event such as an agenda, date, time, location, and attendance.			

CE-9	5	Support an annual solar informational session and/or solar tour explaining solar PV opportunities and policies. Show that session/tour was made accessible to all members of the community including those in disadvantaged communities.	☐
An engaged and informed community can encourage solar market growth and increase the likelihood that local homes and businesses will pursue solar installations. Solar informational sessions and solar tours are ways to educate community members about the solar energy and the processes involved with an installation. Counties should ensure that sessions are inclusive and accessible to a diverse audience.			
Recommended Verification: Provide a link(s) to details about the solar informational session or tour such as an agenda, date, time, and location.			
Community Examples: Lower Merion, PA SolSmart Bronze Sarasota County, FL SolSmart Silver			
Resources: Solar Tour Resources National Solar Tour			

CE-10	5	At least annually, partner with local colleges, workforce or economic development organizations/commissions, etc. to host renewable energy career fairs, networking events, or jobs trainings.	☐
As local solar markets grow, counties can promote solar job opportunities with community colleges and workforce development organizations to ensure a well-trained, local workforce. The organization should provide technical and monetary assistance, provide connections and information. The event that results as an outcome from this partnership should be publicly co-hosted and marketed by the county.			
Recommended Verification: Provide a link(s) to details about the fair, networking event or job training and an agenda, date, time, and location.			
Resources: Solar Career Map Interstate Renewable Energy Council (IREC) Solar Ready Vets Interstate Renewable Energy Council (IREC) Solar Workforce Development Pilot St. Louis, MO Workforce Development Grid Alternatives			

CE-11	5	Demonstrate county level support for local solar projects through speeches, press releases, opinion articles, etc.	☐
Local governments can encourage solar market growth by highlighting solar energy goals, initiatives, and success stories through various communications strategies. Share the links and/or videos of communications efforts on the organization's solar landing page.			
Recommended Verification: Provide a link to a document demonstrating encouragement of solar PV projects.			
Community Examples: Fayetteville, AR SolSmart Gold Louisville, KY SolSmart Gold			
Resources: Stakeholder Engagement SolSmart's Toolkit for Local Governments			

CE-12	10	Discuss solar PV goals and/or strategies for increasing solar PV development, including large-scale solar plans, solar access, and/or solar adoption in disadvantaged communities, within an appropriate committee, commission, taskforce, and/or working group. (e.g., solar is a recurring agenda item during monthly sustainability commission meetings).	☐
An Environmental Advisory Council, Sustainability Committees, or Climate Action Taskforce is a great way to keep residents and key stakeholders actively engaged in community energy policy and development. These groups can assist in the development of solar energy goals and strategies, lead community-based solar initiatives, and provide communication and outreach support to inform community members about solar initiatives and plans.			

Recommended Verification: Provide meeting minutes (including a list of follow-up action items) or materials prepared for the meeting (e.g., handouts and slides) from within the past year and provide documentation of the regularly scheduled frequency of these meetings.
Community Examples: Branford, CT SolSmart Bronze Fairfield, CT SolSmart Gold
Resources: Stakeholder Engagement SolSmart's Toolkit for Local Governments Solar and Resiliency: Integrative Financing Strategies for SolSmart Communities SolSmart Issue Brief Solar Power in Your Community Office of Energy Efficiency and Renewable Energy

Market Development

MD-1	20	Demonstrate activity in state regulatory and/or legislative proceedings regarding solar PV.	☐
Counties can provide an important voice into the development of state-level solar energy policy, strategies, and incentives. Government staff can track policy developments actively and develop appropriate strategies to interact with state regulators and legislators. Interactions with ISO/RTO are included in this criterion.			
Recommended Verification: Provide a link to public comments on solar energy or related energy proceedings, op-eds in local newspapers, or agenda, minutes, and/or recordings of meetings attended by representatives of the local government.			
Community Examples: Ann Arbor, MI SolSmart Silver Santa Fe, NM SolSmart Bronze			
Resources: Engagement Guidance American Cities Climate Challenge Renewables Accelerator Engagement Tracker American Cities Climate Challenge Renewables Accelerator The Federal and State Context: Policies Affecting Solar Energy Development SolSmart's Toolkit for Local Governments			

MD-2	20	Support a community-wide group purchase program (e.g., Solarize). Program must have occurred within the last 2 years.	☐
Counties can support or host community group purchase programs for solar energy. Bulk purchasing can reduce the costs of solar installations for community members. These limited time-offers have had consistent success in providing discounts of up to 20% of installed costs for residential systems.			
Recommended Verification: - Provide a link to a website where the Solarize campaign has been publicly announced. - Provide details about the status of an ongoing solarize campaign or final metrics of a completed solarize campaign.			
Community Examples: La Crosse County, WI SolSmart Bronze Montgomery County, MD SolSmart Gold			
Resources: Procurement Guidance- Solarize American Cities Climate Challenge How to Development a Solarize Campaign SolSmart Webinar Market Development and Finance SolSmart's Toolkit for Local Governments Solarize Your Community New York State Energy and Research Development Authority (NYSERDA) Solarize Mass Massachusetts Clean Energy Center			

MD-3	10	Define and implement a pathway specifically for low-to-moderate income (LMI) residents to participate in a community-wide group purchase program through program design and/or financing support options.	☐
It can be particularly difficult for low-to-moderate income (LMI) households to participate in solar purchasing programs. These programs may require a minimum credit score, an upfront deposit, or have contract terms that present barriers for some residents. Counties can help to identify these barriers and help overcome them, for example by providing incentives for income-qualified participants.			
Recommended Verification: Provide details that explains the forms of financing support or program design elements that support LMI residents in solar PV group purchase program.			
Community Examples: Durham, NC SolSmart Gold Philadelphia, PA SolSmart Gold			
Resources: Procurement Guidance- Solarize American Cities Climate Challenge Narrowing the Equity Gap through Solarize Rocky Mountain Institute How to Development a Solarize Campaign SolSmart Webinar Inclusive Solarize Campaign Guide City Renewables Accelerator Market Development and Finance SolSmart's Toolkit for Local Governments			
MD-4	20	Support a community solar program.	☐
Community solar offers residents and businesses an opportunity to own or lease a portion of a solar project in exchange for economic benefits proportional to their share. These economic benefits are commonly delivered in the form of electricity bill credits. For renters, and homes or business that are not suitable sites for solar, community solar programs allow consumers to access solar without installing panels on their homes or business. Community solar can be provided by utilities, a third party, or a non-profit. Supporting actions include making community solar information available on the county website/solar landing page, map of community solar projects, how to subscribe and what a subscription entails. To be eligible for MD-4, the county must be an official partner and/or provide tangible support (staff time, resources, etc.) to the community solar program.			
Recommended Verification: Provide a link to information about the community solar program, including any outreach materials and details about program design.			
Community Examples: Austin, TX SolSmart Gold Fort Collins, CO SolSmart Gold			
Resources: Community Solar SolSmart's Toolkit for Local Governments Where to Find Community Solar Solar United Neighbors National Community Solar Partnership Technical Expertise and Capacity Building U.S. Department of Energy National Community Solar Partnership Expanding Solar Participation through Community Solar SolSmart Issue Brief Expanding Solar Participation through Community Solar SolSmart Webinar Procurement Guidance American Cities Climate Challenge Renewables Accelerator Community Solar National Renewable Energy Laboratory (NREL) Community Solar Resources U.S. Department of Energy			
MD-5	10	Define and implement a pathway specifically for low-to-moderate income (LMI) residents to participate in a community solar program through program design and/or financing support options.	☐
It can be particularly difficult for low-to-moderate income (LMI) households to participate in solar purchasing programs. These programs may require a minimum credit score, an upfront deposit, or have contract terms that present barriers for some residents. Counties can help to identify these barriers and create strategies to overcome them, by providing incentives for income-qualified participants.			
Recommended Verification: Link to information on solar landing page or provide signed memo summarizing the forms of financing support or program design elements that support LMI residents in solar PV group purchase program.			

Community Examples: • Denver, CO SolSmart Gold • Washington, DC SolSmart Gold	
Resources: • Community Solar SolSmart's Toolkit for Local Governments • Design and Implementation of Community Solar Programs for Low- and Moderate-Income Customers National Renewable Energy Laboratory (NREL) • Procurement Guidance American Cities Climate Challenge Renewables Accelerator • Community Solar + Rocky Mountain Institute • National Community Solar Partnership Technical Expertise and Capacity Building U.S. Department of Energy National Community Solar Partnership • Equitable Access to Community Solar: Program Design and Subscription Considerations National Renewable Energy Laboratory (NREL)	

MD-6	20	Provide residents with Community Choice Aggregation/Energy that includes solar PV as a power generation source.	☐
Counties can increase access to solar energy for their operations and their residents through community choice aggregation. Community Choice Aggregation allows local governments to aggregate energy demand within their jurisdiction and procure power from an energy supplier while the local utility provides transmission and distribution services. Many local governments utilize community choice to procure more renewable energy, including solar, than would be available from their local electric utility. States must have enabling legislation for local governments to provide community choice aggregation.			
Recommended Verification: • Provide a link to details about a Community Choice program (with solar PV as a power generation source) that is available for residents.			
Community Examples: • San Jose, CA SolSmart Gold • Somerville, MA SolSmart Gold			
Resources: • Community Choice Aggregation Toolkit New York State Energy and Research Development Authority (NYSERDA) • Starting a New CCA California Community Choice Association (CalCCA) • Community Choice Aggregation SolSmart Issue Brief • Community Choice Aggregation: Challenges, Opportunities, and Impacts on Renewable Energy Markets National Renewable Energy Laboratory (NREL) • Using Community Choice Aggregation to Achieve Clean Energy Goals SolSmart Webinar			

MD-7	10	Provide a PACE financing program that includes solar PV as an eligible technology.	☐
Property Assessed Clean Energy (PACE) financing is an on-bill financing mechanism which enables repayment of long-term, low-interest loans on property tax bills. PACE can be used to finance renewable energy and energy efficiency projects on residential and/or commercial properties, depending on the PACE financing program design. In order for residents and business to access PACE financing, it must be enabled at the state and local level.			
Recommended Verification: • Provide a link to the local ordinance creating a PACE program. • Provide a link to the PACE program webpage.			
Community Examples: • Deerfield Beach, FL SolSmart Silver • Grand Rapids, MI SolSmart Silver			
Resources: • Market Development and Finance SolSmart's Toolkit for Local Governments • Resources PACENation			

MD-8	20	Provide local incentives or work with a local finance institution to offer loans, rebates, grants, or other incentives for solar PV projects.	☐
In addition to state and federal incentives, counties can also encourage solar development within their jurisdictions by providing tax exemptions, rebates, or other financial incentives. Loans, rebates, or grants can improve the financial prospects of a solar project, allowing more community members to install solar.			
Recommended Verification: • Provide a link to an ordinance creating local incentives. • Provide a link to an application or form that are required for a solar PV system to be eligible for incentives or financing.			
Community Examples: • Loudoun County, VA SolSmart Silver • St. Louis Park, MN SolSmart Silver			
Resources: • Market Development and Finance SolSmart's Toolkit for Local Governments			
MD- 9	20	Provide locally-enabled finance or work with a local finance institution to offer locally-enabled finance (e.g., a revolving loan fund) for solar PV. Financial institutions could include entities such as a local or regional bank, CDFI, or credit union).	☐
Counties can work with local financial institutions to offer and/or promote financing options for solar projects.			
Recommended Verification: • Provide link to financing options for solar energy. • Provide a memo detailing how the local government partnered with the financial institution to offer a financial incentive for solar energy. • Provide a link to an application or form that are required for a solar PV system to be eligible for financing.			
Community Examples: • Lafayette, CO SolSmart Gold • Milwaukee, WI SolSmart Gold			
Resources: • Market Development and Finance SolSmart's Toolkit for Local Governments			
MD- 10	20	Provide or partner to provide local incentives or locally-enabled finance as described in MD-8 and MD-10 for solar PV to low-to-moderate income (LMI) households, disadvantaged communities, Disadvantaged Business Enterprises (DBEs), Minority and Women Owned Business Enterprises (MWBEs), and/or non-profit organizations that provide community services.	☐
Counties can support solar installations by LMI households, DBEs, and non-profit organizations by providing incentives such as low-interest loans, grants, on-bill financing and a variety of tax incentives and rebates. Counties can expand solar programs to disadvantaged residents by implementing any number of these programs.			
Recommended Verification: • Provide a link to an ordinance creating local incentives or financing options. • Provide a link to an application or form that are required for a solar PV system to be eligible for incentives or financing.			
Community Examples: • Boulder, CO SolSmart Gold • Portland, OR Not Designated			
Resources: • Market Development and Finance SolSmart's Toolkit for Local Governments • Resources to Support Initiatives for Low-to-Moderate Income Communities SolSmart Webinar • Resident, Provider, and Housing Type National Renewable Energy Laboratory (NREL)			

Innovative Action

IA-1	Varies	The actions identified in the categories above represent many of the most common and impactful efforts organizations are taking to make going solar easier and more affordable for residents and businesses. However, we know that counties across the country are developing innovative ways to promote and deploy solar energy. If your county has taken action that was not captured in any of the criteria above, please share it with us.	☐
Innovative actions will be reviewed by a team of solar experts and each action may be worth up to 20 points.			
Recommended Verification: • Provide a memo describing the innovative action and include any supporting documentation or links that provide additional details.			
Community Examples: • Grayslake, IL SolSmart Bronze ○ The Grayslake Sustainable Business Initiative recognizes local businesses that are choosing to be more sustainable. Solar energy is emphasized by awarding a business automatic gold designation if they have installed a solar energy system. • Montgomery County, MD SolSmart Gold ○ Montgomery County's 4th Solar Co-op offered EV charging as an option through the solar co-op. This helps promote EV charging and can reduce costs through group purchasing.			

Acknowledgment

This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Solar Energy Technologies Office Award Numbers DE-EE0009950 & DE-EE009951.

Full Legal Disclaimer

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.