# EnergizeNC (Solar For All)

April 23, 2024

# Agenda

- Welcome and Introductions
- Solar for All Summary
- Market Overview
- EnergizeNC Programs
- Innovative Pilots
- Quality Assurance
- Complementary Programs
- How to Get Involved
- Q&A / Discussion



Photo courtesy of Dennis Schroeder, NREL

# Welcome and Introductions

## EnergizeNC Coalition Partners

- NC State Energy Office
- NC Advanced Energy
- NC Clean Energy Fund
- NC Clean Energy Technology Center

## Other Key Partner

- NC Governor's Office

# The Opportunity

EPA's Solar for All (SFA) funding provides an unprecedented opportunity for low-income households and disadvantaged communities to access solar energy and reap the benefits of reduced energy costs.



# Solar For All (EPA) – $7 Billion

- Part of $27 Billion Greenhouse Gas Reduction Fund (authorized in the Inflation Reduction Act)
- Intended to “spur the deployment of residential distributed solar energy to lower energy bills for millions of Americans and catalyze transformation in markets serving low income and disadvantaged communities.”
- NC State Energy Office is lead applicant for North Carolina
- Application submitted 10/11/2023
- NC Application amount: $250,000,000 for a 5-year program
  - 20,000 households
  - 69.5 MW distributed solar
  - Pilots of storage and community solar
- Award announcements expected in Spring 2024 (any day now!)

# Solar For All Guidelines

- Program Objectives:
  - Reduce emission of greenhouse gases and other air pollutants
  - Deliver benefits of greenhouse gas and air pollution reducing projects to American communities, particularly low-income and disadvantaged communities
  - Mobilize financing and private capital to stimulate additional deployment of greenhouse gas and air pollution reducing projects
- 100% of funds must be deployed to “enable low-income and disadvantaged communities to deploy or benefit from zero-emissions technologies.”
- At least 75% of funds must be used for financial assistance (subgrants, rebates, loans, forgivable loans and other financial products)
- Up to 20% of assistance can be used for enabling upgrades: roof repairs, electrical system upgrades, energy efficiency
- Can include storage when paired with solar for resiliency and demand response
- Minimum of 20 percent savings for all households served (average household electricity bill)

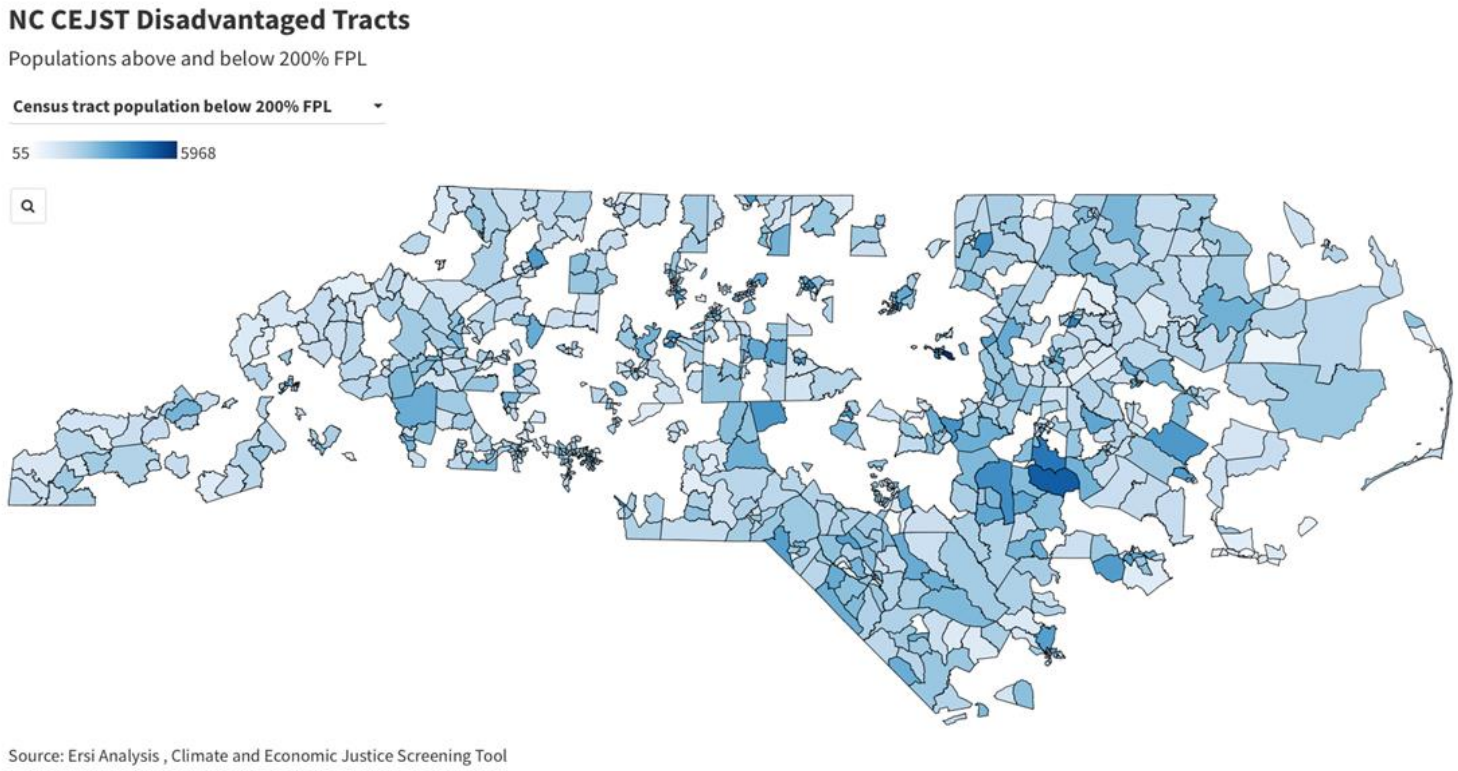
# EnergizeNC Goals

- **Goal #1:** Create a comprehensive project management approach over a one-year planning period to include input from low income and disadvantaged communities.
- **Goal #2:** Reduce greenhouse gas (GHG) emissions, lower household energy costs, and foster environmental justice through the installation of rooftop solar at low-income single-family and multifamily units across North Carolina, including community solar access.
- **Goal #3:** Foster and develop a trained workforce to deploy solar in all regions of the state, especially in minority and tribal communities, while working to ensure transparent ethical and business practices that protect consumers from potential market abuses.
- **Goal #4:** Provide robust community engagement to ensure that project benefits flow to disadvantaged communities and individuals.

# Defining Low-Income and Disadvantaged Communities

Households and communities can benefit from Solar for All if they are qualified under any one or more of the categories in the EPA definition of low-income and disadvantaged communities.

This includes communities identified as disadvantaged by the Climate and Economic Justice Screening Tool (CEJST).




Map Credit: William Munn, Vote Solar

Climate and Economic Justice Screening Tool

# EnergizeNC Timeline

**Spring 2024**

EPA Awards Announced

**Summer 2024**

Community and stakeholder engagement begins

**Late Summer 2024**

EPA Awards Deployed

**Fall 2024**

Community and stakeholder engagement continues

**Fall 2024**

Program design begins

**Fall 2025**

Program Launch

**2025 - 2029**

Statewide program rollout

# EnergizeNC to Date

- Coalition Formation – Pre-planning and coordination
- Stakeholder Engagement
  - Input and letters of support (Q3 2023)
  - *Market Development Workshop (November 2023)**
  - Utility Roundtable (January 2024)
  - Local Government Roundtables (April 2024)

# Market Overview – Solar in NC

**Installed Solar Capacity** *(SEIA, Q4 2023)*

1. California (46.8 GW)
2. Texas (22.8 GW)
3. Florida (13.9 GW)
4. **North Carolina (9.3 GW)**
5. Arizona (7.6 GW)



Image: NC DEQ

# Market Overview – Solar in NC

- **2023 Growth in Solar Capacity –** *(SEIA, Q4 2023)*

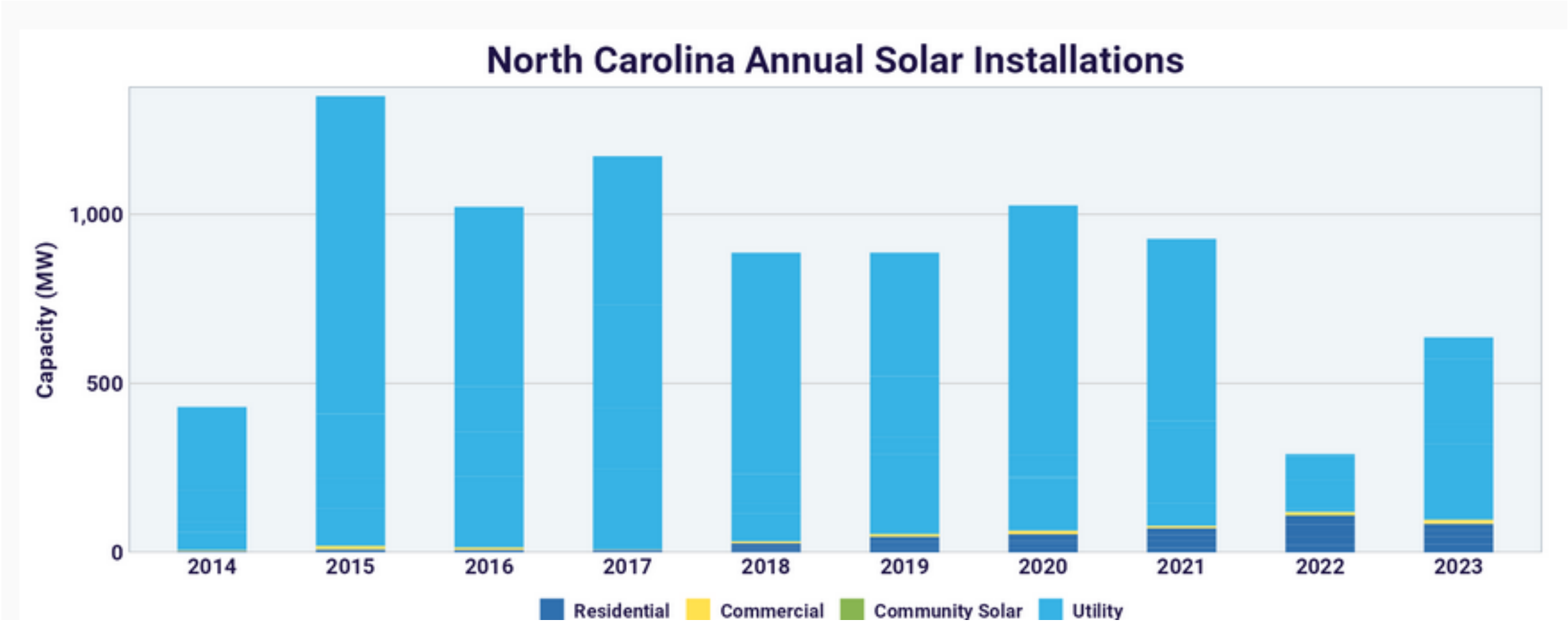
    1. Texas (6.5 GW)
    2. California (6.2 GW)
    3. Florida (3.2 GW)
    4. Colorado (1.6 GW)
    5. Ohio (1.6 GW)

    **13. North Carolina (0.6 GW)**



# Market Overview – Solar in NC

Image: SEIA, State Policy Overview Q4 2023



# Market Opportunities



**Rebates, Credits, Loan Assistance**



**Virtual Power Plants and Resiliency**

Valuing (and maximizing) grid services



**Expedited Permitting Processes**

Templates adapted to meet local needs

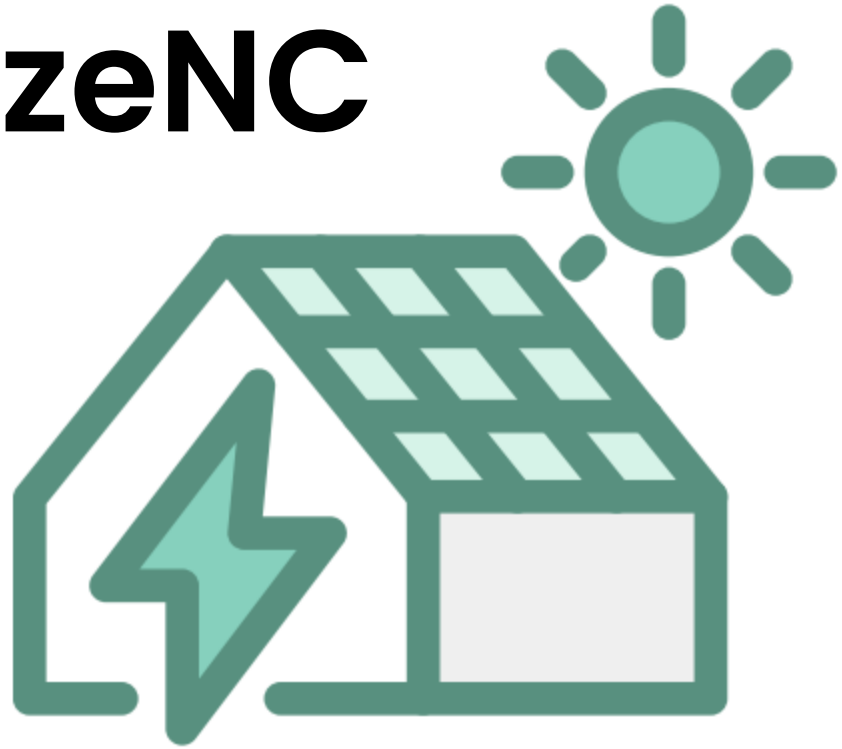


**Engagement and Education**

Customers, Builders, HOAs

Local Government, Housing Authorities

# 2025 – 2030 EnergizeNC Programs



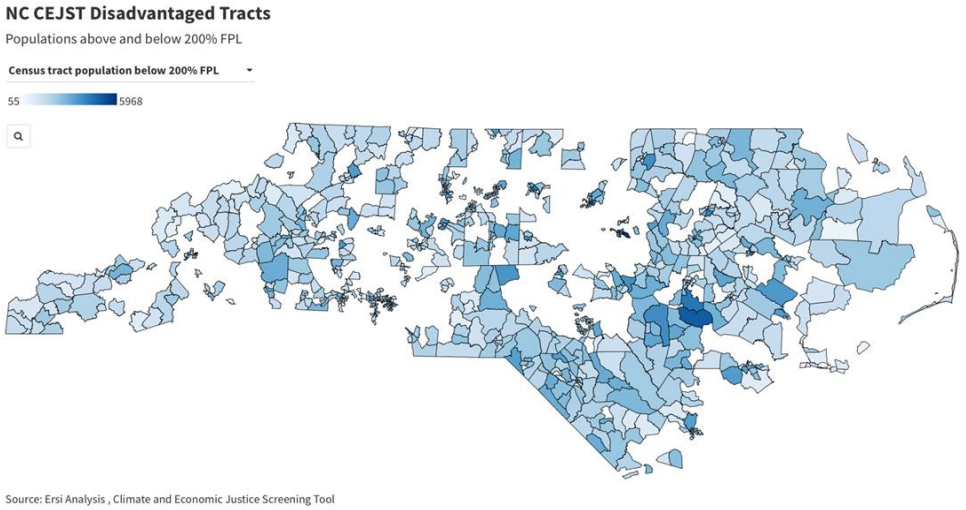
# Program Requirements

## Benefits must flow to households:

- In LIDAC geography *or*
- Meeting eligible household income *or*
- Living in multifamily that meets affordable / low-income criteria

## Required household benefit:

- 20% of average electric bill*




*based on utility territory averages – not actuals

# NC Program

Low-income households:

- Solar rebates
- Current weatherization clients
- Use existing WAP/LIHEAP lists to find homes ready for solar
- Accelerate deferral list work (health and safety repairs) and add weatherization and solar

Moderate- and higher-income households

- Smaller rebates paired with financing. Will explore:
  - Accessible consumer loans
  - Solar leases
  - Expand solarize programs
  - Tariffed on-bill financing

# Affordable Multifamily

- Financing plus grants for housing authorities and nonprofit housing organizations
- Consideration of “direct pay” tax credits (and LMI adder) for nonprofit developers
- Consider HUD utility allowance rules
- Explore leasing

# Community Solar Programs

## Community Solar Subscriptions

- Complying with both Solar for All requirements and state law makes community solar a challenging segment
- Support new subscriptions to existing rural electric cooperative and municipal utility installations
- Support new/planned community solar projects – focus on adding low-income subscribers
- Other potential options:
  - Can an H.B. 589 or H.B. 951 community/shared solar program work?
  - Consider anchor tenants, aggregate buys, and other strategies to lower costs
- Will convene a community solar working group

# Permitting & Zoning Discussion

- Streamlining Permitting Processes
  - Technical assistance will be available to help local governments streamline and improve solar/storage permitting processes
  - Advanced preparation to handle a large volume of applications
  - Piloting the DOE/NREL SolarAPP+ process
- Limitations & Restrictions
  - Ensuring zoning rules do not unreasonably restrict solar and storage projects

# HOA Guidelines Discussion

- HOA Solar & Storage Guidelines
  - Technical assistance will be available to help HOAs update their solar/storage guidelines
  - The coalition will work to develop model HOA guidelines that provide clear standards for solar/storage installation
  - Local governments can help with outreach to HOAs and connecting them with the EnergizeNC coalition

# Solarize Model Discussion

- Promoting Solarize Programs
  - Solarize programs present an opportunity to stretch incentive funding further and reach additional households
  - The EnergizeNC coalition will develop best practices for Solarize programs
  - Exploring program models that would allow for the participation of a variety of installers
  - Local governments can help lead or support Solarize programs
- Lessons learned
  - Build off the success of several past NC solarize programs, including Solarize the Triangle, and engage organizations leading past programs

# Quality Assurance Program Development Considerations

- Clear requirements for contractors to adhere to
- Participation of important LMI stakeholders like community development initiatives, municipalities, Habitat for Humanity, etc.
- Homeowner education, often provided by the stakeholders but can also be an installer requirements
- Performance guarantee

# Consumer Protection

- Vendor Registration Program
  - Design informed with stakeholder input
- Data Access
- Reporting

# Complementary Programs

- Program guidance will detail how the individual programs can be blended and braided to maximize the benefits without “double dipping”
  - Weatherization Assistance Program (WAP)
    - Recently weatherized homes with an enclosed building envelope are ideal candidates for Solar for All
    - Mutually beneficial – 20% from SFA for weatherization upgrades
  - Climate Pollution Reduction Grant (CPRG)
    - Provide WAP with funds to complete health and safety repairs and get homes off the deferral list
  - IRA Home Efficiency and Appliance Electrification Rebates
    - Further reduce household energy burden through electrification or energy efficiency upgrades
  - Direct / Elective Pay for federal Tax Credits for Nonprofits & Govt entities
    - 30% baseline (up to 70% with bonus credits)

# EnergizeNC.org

- Sign up for updates
- Fact Sheet
- Application Executive Summary




## *Coming in 2025*

- Solar for All specifics
- Links to financing
- Complimentary programs resources
- Rebates info

# Discussion / Q & A

NC CLEAN ENERGY TECHNOLOGY CENTER

advanced energy

NORTH CAROLINA DEQ Department of Environmental Quality

North Carolina Clean Energy Fund

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