



NC Clean Energy Technology Center

Carolinas Renewable Energy
Development Assistance & Siting Hub (DASH)

NASEO Meeting

February 6, 2025

NC Clean Energy Technology Center

Major Program Areas:

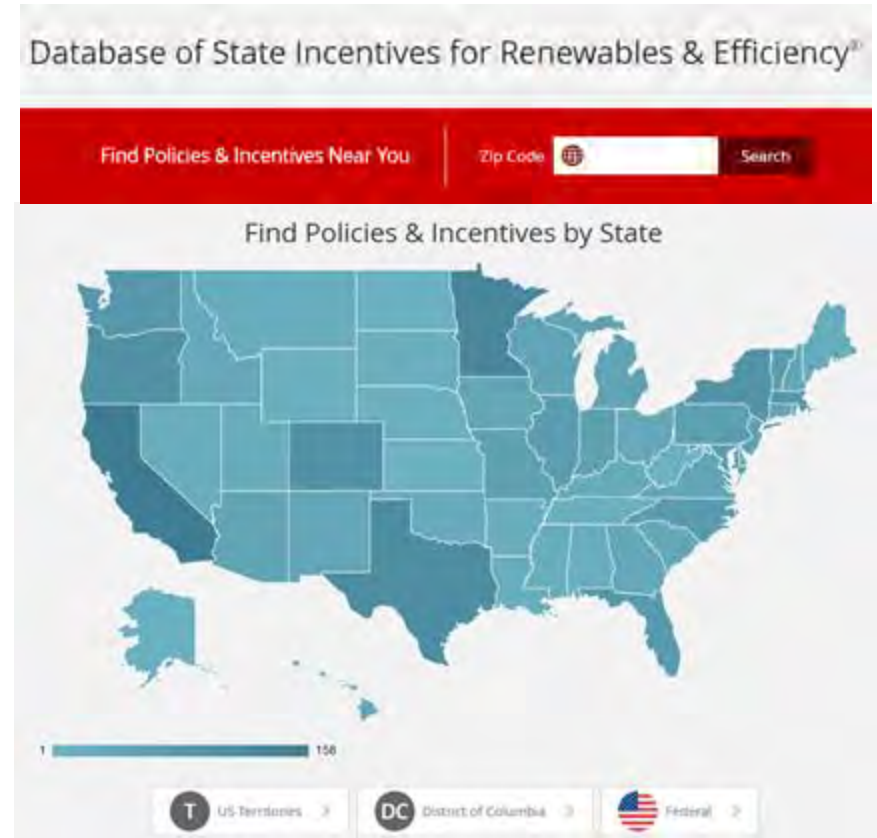
- Renewable Energy
- Clean Power & Efficiency
- Clean Transportation
- Energy Policy & Markets
- Workforce Development
- Education & Outreach



- Created in December 1987 as a resource for solar energy programs and information, training, technical assistance and applied research
- Part of the College of Engineering at N.C. State University
- Funded in part by the General Assembly; plus federal and state grants, foundations, and service fees for consulting
- Mission - advance a sustainable energy economy by educating, demonstrating and providing support for clean energy technologies, practices, and policies

Database of State Incentives for Renewables and Efficiency (DSIRE)

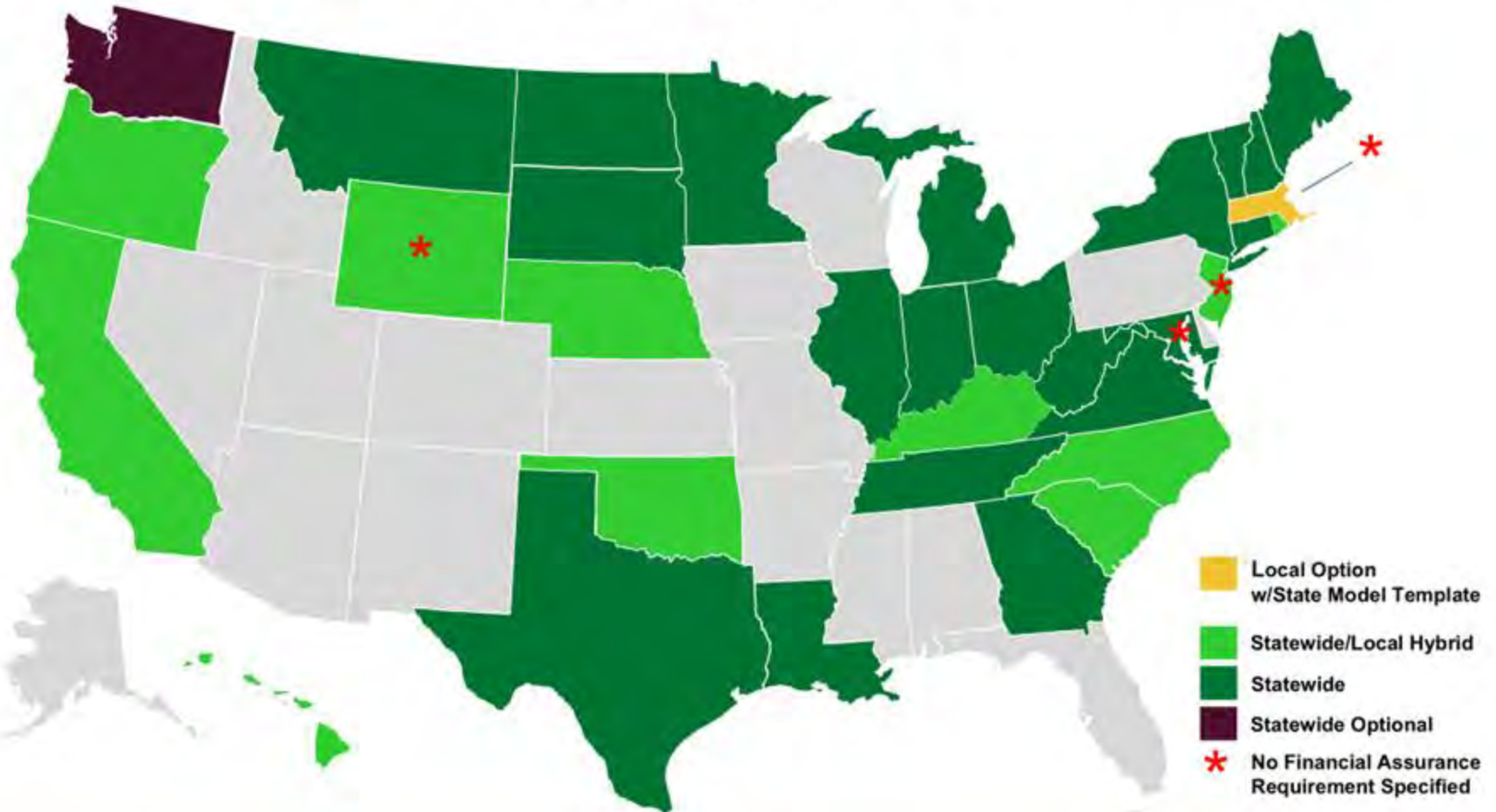
- Most comprehensive source on energy efficiency and renewable energy financial incentives & policies
- Includes federal, state, local and utility incentives, regulations and programs
- Approximately one million unique users per year
- Interactive maps and search features

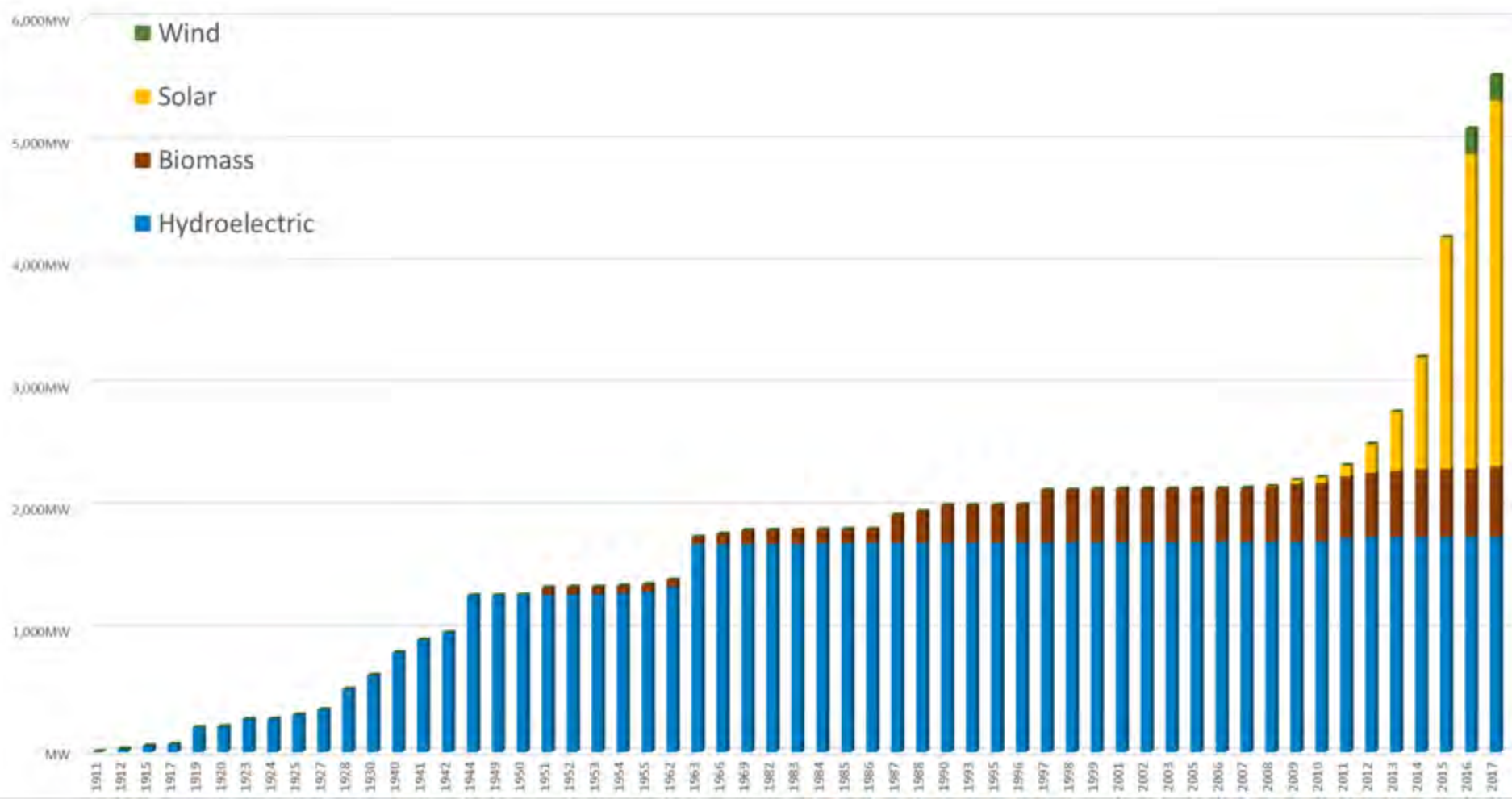


www.dsireusa.org

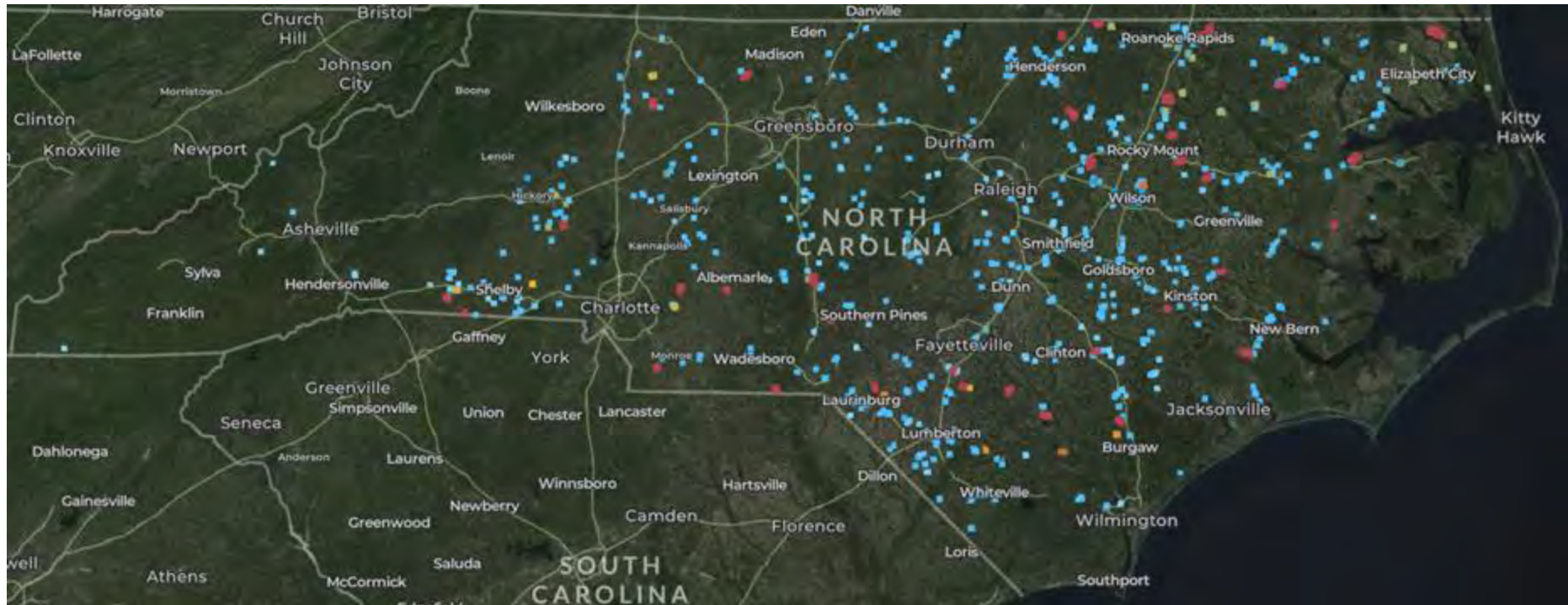
Solar Decommissioning Policy

www.dsireusa.org / December 2024

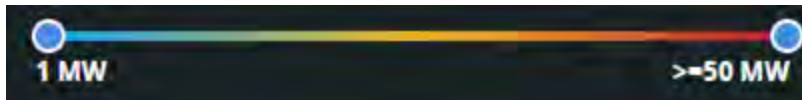




North Carolina Utility Scale Solar



<https://eerscmap.usgs.gov/uspvdb/viewer>



678 solar projects 1 MW or above
Total Capacity: 6,034 MWac

Solar Development



4 to 5 years, 80-90% attrition



9 months - 1 year

Model Solar Ordinance



NC SUSTAINABLE
ENERGY ASSOCIATION



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Formerly the NC Solar Center

- Designed to be adapted and then adopted by jurisdictions across the state and to serve as the basis for local development ordinances in their respective communities.
- Provides valuable guidance while still allowing flexibility that local governments may want to help them best address local interests.
- go.ncsu.edu/template-solar-ordinance



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Template Solar Energy Development Ordinance for North Carolina

- Designed to be adapted and then adopted by jurisdictions across the state and to serve as the basis for local development ordinances in their respective communities.
- Provides valuable guidance while still allowing flexibility that local governments may want to help them best address local interests.
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Contents of Template Ordinance

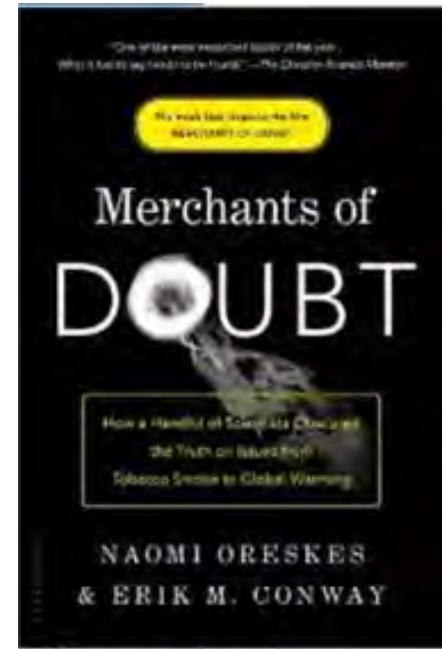
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2013 NC Template Solar Ordinance Key Working Group Members



BUT...

**This led to LOTS of Questions
and
LOTS of Internet-based Myths**



Policymaker and Neighbor Concerns

- **Health & Safety Concerns**
 - Toxicity, EMF/Radiation, Electric Shock, Fire
 - go.ncsu.edu/solar-health-and-safety
- **Land Use & Land Impacts Concerns**
 - Agricultural land tradeoffs, Returning the land to original state, Other land use conflicts, Decommissioning, waste management and recycling
 - go.ncsu.edu/solar-and-ag
- **Aesthetics Concerns**
 - Sound, Glare, Visual Impacts
- **Local Economic and Regulatory Issues**
 - Property Taxes, Permitting & Local Ordinances
 - Impact on property values – site and neighbors
 - Economic development and jobs – how substantial and long-lived?



Emerging Significant Issues

- Increasing Size and Scale
- Decommissioning/Dealing with Economic Risks to Counties
- Recycling Solar & Batteries
- New Technology Synergies – Fitting Pieces Together
 - Solar, Storage, EVs, Micro and Mini Grids
 - Increases the Reliability and Resiliency Opportunities

*75 MW_{AC} in Orangeburg
County SC, 1000 acres*





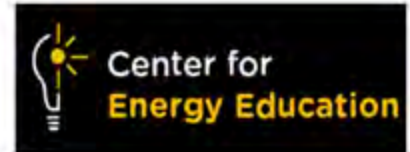
Renewable Energy Siting through Technical Engagement and Planning (R-STEP)





CAROLINAS DASH Supporting States and Communities on Renewable Energy Siting and Permitting

Stay Connected



What is the Carolinas Renewable Energy DASH?

Three Phases

Stakeholder and
community
engagement

Update understanding of local
concerns about renewable
energy development

Surveys and public meetings

Resource
development

Targeted information to
address concerns

online technical assistance
hub

working groups to form
consensus

Technical assistance to
communities, local
governments,
landowners, and
developers

Providing education and
technical assistance on topics
related to renewable energy
planning, permitting, and
siting

Community Input

- Construction/Decommissioning/Land Use Impacts
- Health and Safety
- Community Involvement in Project Development
- Economic Benefits/Workforce
- Aesthetic Impacts/Community Impacts
- Other Issues?

Carolinas Renewable Energy DASH Online Technical Assistance Hub

- Educational materials/resources on important topics, best practices, and issues related to renewable energy siting, concerns, and priorities
- Database of local renewable energy development ordinances in the Carolinas
- An online form for communities and local govt to request technical assistance:
 - Ex. answering questions, assisting with ordinance revisions, identifying best practices, requests for workshops on specialized topics, etc.
- Frequently asked questions

Landing page available now at carolinas-dash.org →



All resources expected to be available by Fall 2025!



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Contact us for more information

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