NASEO
National Association of State Energy Officials

SMART SURFACES COALITION

Advancing Energy Reliability and Resilience with Smart Surfaces

A Smart Surfaces Primer for State and Territory Energy Offices

Contents

ACKNOWLEDGEMENTS

This primer was authored by Grace Lowe of the National Association of State Energy Officials (NASEO) with support from Arvand Golbazi, Sarah Trent, Sandy Fazeli, Kirsten Verclas, and David Terry of NASEO. NASEO would like to thank the Smart Surfaces Coalition for their insights and expertise, which informed this report. We would also like to thank the State Energy Offices for their input and contributions to this resource.

NASEO
National Association of State Energy Officials

National Association of State Energy Officials
1812 North Moore Street, Suite 1810
Arlington, Virginia 22209
703.299.8800 | www.naseo.org

Cover and left photo by alacatr/istock

Photo by alacatr/istock

Introduction

As State and Territory Energy Offices work to support a more reliable, resilient, and affordable energy system, Smart Surfaces—which include technologies such as cool roofs and pavements, rooftop and canopy solar, green roofs, and trees—offer cost-effective solutions to help increase efficiency and reduce electricity during peak demand while protecting critical infrastructure from extreme heat and flooding. The expansion of data centers and computing needs, onshoring of industry, and beneficial electrification of buildings and vehicles are driving significant growth in electricity demand across the United States. With summer peak demand projected to rise by approximately 225 gigawatts over the next ten years and some regions expected to experience high or elevated risk of electricity shortfalls, State Energy Offices are considering a range of strategies and technologies to help keep the lights on for households and businesses while avoiding large cost increases and advancing state economic development and environmental goals.[1]

While investments in new generation and transmission infrastructure are needed and being pursued in most states, supply chain constraints and interconnection and permitting delays may slow build out. Even without these limitations, some generation technologies require significant time and capital investment before they are operational. Smart Surfaces, in addition to building energy efficiency and other electricity load management solutions, provide a more immediate and cost-effective tool to address near-term reliability concerns. State Energy Offices can help enable the strategic implementation of these solutions by incorporating Smart Surfaces into energy program design, statewide energy planning efforts, and recommendations to policymakers and other key stakeholders. This primer, part of a series of Smart Surfaces resources developed for State Energy Offices, explores how State Energy Offices can integrate Smart Surfaces into their energy reliability and resilience strategies.

Reliability and Resilience Benefits of Smart Surfaces

Rising temperatures and more frequent heatwaves are increasing demand for cooling, leading to greater strain on the electrical grid and higher risks of blackouts and equipment failures. Results from multiple studies examining the impact of ambient temperature on peak electricity demand show that for every one degree Celsius increase in outdoor temperature, there can be up to an 8.5 percent increase in total electricity demand and up to a 4.6 percent increase in peak electricity demand.[13] Smart Surfaces like cool roofs and walls can help reduce building energy consumption and mitigate urban heat island effects and thus reduce overall stress on the electric grid, particularly during peak summer demand periods. For example, a study in Chicago found that cool roofs reduce air conditioning energy consumption by about 16 percent on average.[14] By reducing air conditioning load and improving the efficiency of outdoor HVAC equipment, cool roofs can help mitigate energy reliability concerns during peak summer demand periods while keeping building occupants comfortable. The Cool Surfaces Savings Explorer developed by the Lawrence Berkeley National Laboratory allows users to input location and project-specific parameters like climate zone and surface albedo to estimate the energy and savings potential of cool surfaces.[15]

Some emerging cool roof technologies have also been used to lower energy costs for data centers, which require significant amounts of energy to power their operations and keep computing equipment cool. For example, a company called SkyCool is installing their passive radiative cooling technology to help cool data centers, as well as other commercial and industrial buildings with large cooling demand, like grocery and convenience stores.[16]

WHAT ARE SMART SURFACES?

"Smart Surfaces" is a term coined by the Smart Surfaces Coalition[i] and includes a variety of surface infrastructure interventions and technologies that help enhance local resilience, reduce energy costs, and lower peak demand.

Cool Pavements
Cool pavement, also referred to as reflective pavement, reflects a higher percentage of sunlight than typical asphalt pavement. Due to the higher reflective value, cool pavement stays cooler throughout the day and reduces the urban heat island effect and thus peak demand. There is no specific reflectivity value that a pavement must have to be labeled as "cool." Rather, it is a relative category that may differ among jurisdictions with different definitions, requirements, or incentive thresholds.[ii] Cool pavement can be applied on roads or parking lots, although the materials for different applications may vary.

Permeable Pavements
Permeable pavement allows for the infiltration and temporary capture of water unlike typical impervious concrete or asphalt pavement. Permeable pavements reduce stormwater runoff, leading to increased flood prevention and lower water treatment costs, thereby saving energy. When specced properly with lighter colored materials, permeable pavements also reflect more sunlight and thus help mitigate urban heat island effects.

Trees and Green Stormwater Infrastructure
Trees and green stormwater infrastructure (such as bioswales, urban meadows, and rain gardens) can help manage stormwater, improve air quality, and mitigate extreme heat events by reducing the temperature of surrounding air, pavement, and building surfaces. For example, shade from trees can lower street-level temperatures by more than five degrees Fahrenheit.[2]

---

i The Smart Surfaces Coalition is a 501(c)(3) organization committed to the rapid, cost-effective global adoption of Smart Surfaces to enable cities to thrive despite climate threats, save cities billions of dollars, create jobs, decrease heat, reduce flood risk, mitigate climate change, and improve city livability, health, and equity.

ii Although there is no common definition of cool pavement, a target solar reflectance of 0.30 or higher is a good starting point for policymakers and developers to consider.

In addition to reducing energy consumption and mitigating peak summer electricity demand, some Smart Surfaces like trees, green roofs, and green stormwater infrastructure, can help manage stormwater and protect critical infrastructure from flooding damage. These nature-based solutions help prevent stormwater run-off and resultant flooding by retaining rainwater where it falls. Reducing the amount of stormwater that must be collected and treated as wastewater saves energy.[17] For example, green roofs can capture as much as 86 percent of stormwater runoff and can lower the peak flow rate by up to 93 percent.[18] Similarly, bioswales (shallow, vegetated channels commonly placed alongside roadways) have proven very effective in decreasing both runoff volume and pollutant levels. One study showed that a bioswale could retain 40 percent of the stormwater coming from an area 231 times as large as the bioswale itself.[19]

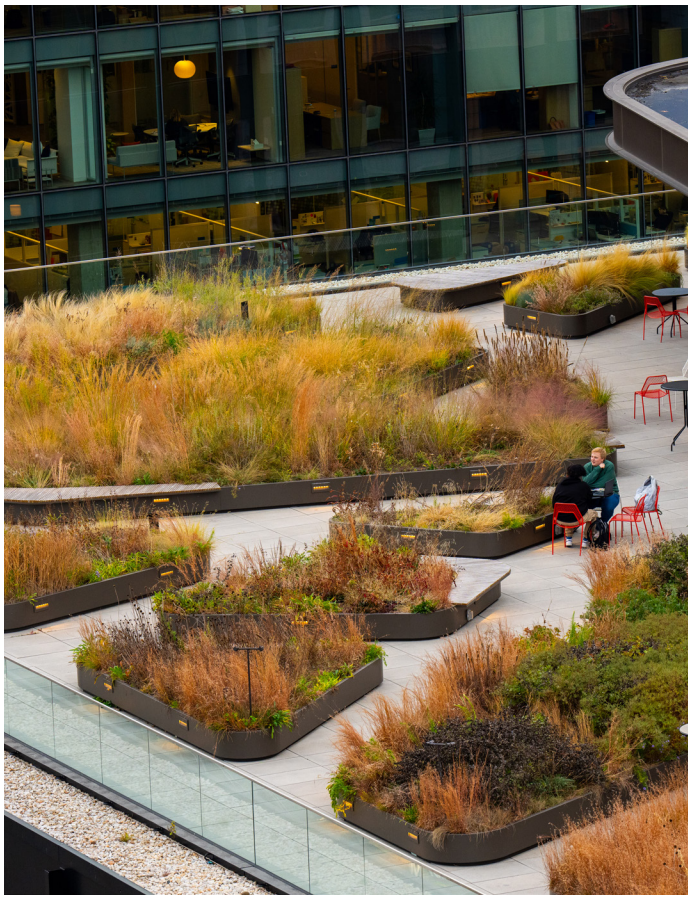

Photo courtesy of Smart Surfaces Coalition

Cool Roofs
Similar to cool pavements, cool roofs reflect a higher percentage of sunlight away from the roof, leading to cooler temperatures on the roof surface and in the building. On a hot sunny day, cool roofs can stay more than 50 degrees Fahrenheit cooler than conventional dark roofs.[3] Because of their cooling effect, cool roofs can reduce air conditioning needs and lower energy costs in the summer. Studies show that retrofitting 80 percent of commercial building roof area in the U.S. with cool roofs would yield net annual cooling energy cost savings of $735 million.[4] In addition, cool roofs may experience less wear and tear due to reduced temperature fluctuation, which can lower maintenance costs and extend roof lifespan.

Green Roofs
Green roofs, also known as vegetative roofs, contain weather-tolerant plants and are typically installed on low-slope roofs. The vegetation on roofs reduces how much sunlight is absorbed by the building, saving energy used for heating and cooling, and reduces stormwater runoff.

Cool Walls
Like cool roofs, cool walls reflect more sunlight than non-cool walls. As with cool pavements, there is no set definition of a reflectivity threshold for cool walls; however, an initial solar reflectance of 0.40-0.50 or higher is a good starting point for policymakers and developers to consider. Cool walls can reduce the cooling needs of a building by keeping it cooler during hot summer days and thus reducing electricity consumption and stress on the grid. Researchers estimate that cool walls can shave up to 8.3 percent off monthly energy bills for single-family homes in warm U.S. climate zones.[5]

Solar Panels
Incorporating solar panels on building roofs, walls, and above parking lots and bus stops can provide shade for buildings and pedestrians while also generating clean electricity for the grid.

Opportunities for State Energy Offices to Advance Reliability and Resilience Goals with Smart Surfaces

As State Energy Offices work to enhance energy reliability and resilience, Smart Surfaces offer additional tools to meet these objectives strategically and cost-effectively. By integrating Smart Surface solutions into state energy programs, planning efforts, and policy discussions, State Energy Offices can complement existing efforts and address reliability and resilience challenges through a comprehensive approach.

Financing and Grant Programs

State Energy Offices can help advance the adoption of Smart Surface technologies through existing financing mechanisms and grant programs, where feasible. Well-established financing tools for energy efficiency, on-site solar, water efficiency, and other cost-saving building retrofits, such as Energy Savings Performance Contracts (ESPCs), Commercial Property Assessed Clean Energy (C-PACE) programs, and state-managed energy efficiency revolving loan funds, could be leveraged to support Smart Surface implementation in commercial buildings and buildings owned by municipal and state governments, universities, schools, and hospitals (otherwise known as MUSH market buildings). ESPCs have financed more than $30 billion in cost-effective energy-related upgrades to MUSH market facilities over the last three decades and offer flexibility in terms of the measures able to be financed, as long as energy savings are guaranteed.[20] While some Smart Surfaces (i.e., trees and other green infrastructure) may involve too many variables to guarantee consistent energy savings, other technologies like cool roofs

CUTTING EDGE TECHNOLOGIES

In addition to the more commonly implemented Smart Surface solutions listed above, emerging technologies like passive radiative cooling films and coatings offer additional opportunities to advance energy reliability and resilience goals. Passive radiative cooling films (PRCFs) are specially designed materials that reflect a uniquely high percentage of sunlight and efficiently emit heat at wavelengths that can pass through the Earth's atmosphere.[6] This allows them to cool surface temperatures below the average ambient temperature. When applied to rooftops and shade structures, PRCFs not only help with local cooling but also contribute to a "global cooling" effect by allowing heat to escape into space. Some projections suggest that widespread use of this technology could stabilize global temperature increases[7] and reduce global warming.[8] At the local level, a field study in Phoenix demonstrated that applying cooling films to shade structures at a park can cool the surface temperature of the structure by seven degrees Celsius on average during the day compared to shade structures with no coating, lowering mean radiant temperatures for pedestrians by over three degrees Celsius.[9]

Radiative cooling technologies have also been used to help cool and reduce electricity use from commercial and industrial buildings and can be applied to modular data centers and server rooms to lower cooling demand and associated energy needs.[10] The California Energy Commission funded a passive radiative cooling demonstration project through its Energy Research and Development Division to measure potential energy and peak demand savings and understand how the technology could be scaled across California.[11] Through the grant, SkyCool Systems installed passive cooling film at two supermarket sites in Red Bluff and Milpitas. At the Red Bluff site, the SkyCool panels increased heat rejection capacity by 34 percent, achieving energy savings of about 15 percent and reducing power demand by 5 to 7 kW. In Milpitas, the panels provided both subcooling and precooling, increasing the efficiency of the refrigeration system by 14 percent and saving nearly 20,000 kWh per year. Researchers estimated that if deployed at just 10 percent of California grocery stores with similar cooling systems, the technology could deliver an estimated 6.75 MW of peak demand savings and nearly 38,500 MWh in annual electricity savings, while also lowering the risk of refrigeration failures during extreme heat events, potentially avoiding up to $50,000 in losses per store during heatwaves.[12]

and walls provide reliable energy savings that have been well documented and can help make other energy efficiency improvements go further. By raising awareness of cool roofs and walls and offering technical assistance to building owners and energy service contracting organizations, State Energy Offices can improve building energy performance and resilience while lowering peak energy demand in summer months.

State Energy Offices can also integrate Smart Surfaces into relevant grant programs by updating evaluation criteria and guidance documents, expanding project eligibility where possible, and encouraging Smart Surface interventions as part of larger energy infrastructure and grid resilience projects. When evaluating potential projects, State Energy Offices could award additional points to projects that include Smart Surfaces, like cool roofs and walls, passive radiative cooling technologies, and nature-based solutions in their designs. Projects receiving funding for undergrounding offer a particularly important opportunity for Smart Surfaces integration. For example, if roads and sidewalks are already being excavated to install utility lines underground, those surfaces could be repaved with reflective, permeable or lower-carbon pavement materials, and green infrastructure like bioswales and rain gardens could be added when repaving roads and sidewalks. Adopting these infrastructure upgrades as part of larger grid resilience projects would not only enhance the overall resilience benefits of the project but also improve "build once" outcomes and avoid construction nuisances to local residences while also improving lifecycle cost efficiency.

State-funded resilience hubs, cooling centers, microgrids, and other resilience-focused projects offer additional opportunities to integrate Smart Surfaces. In the District of Columbia, the DC Department of Energy and Environment (DOEE) is supporting the development of community resilience hubs to serve as safe and central gathering places and connect residents with resources, both during emergency events and under normal, "steady state" conditions.[21] DOEE's approach to community resilience hubs is guided by five pillars, which include resilient power and resilient design. DOEE also developed Resilient Design Guidelines, which outline 40 recommended strategies to improve the resilience of both the building and surrounding landscape.[22] Several of the strategies utilize various Smart Surface technologies, such as incorporating green infrastructure, using permeable and reflective pavements, providing vegetative shading, installing cool or reflective roofs, and integrating solar panels.

By strategically leveraging existing financing tools and grant programs, State Energy Offices can accelerate the adoption of Smart Surfaces, enhancing resilience, improving energy efficiency, and increasing the long-term value of public infrastructure investments.

Photo courtsey of NASEO

Planning

As the lead entity for many statewide energy planning efforts, State Energy Offices can integrate Smart Surfaces into relevant state energy reliability and resilience planning processes, such as load forecasting, State Energy Security Plans (SESPs), or statewide resilience plans. Because traditional utility and Regional Transmission Organization (RTO) load forecasts often overlook the impact of state-level energy policies and distributed energy strategies, State Energy Offices are increasingly exploring the development of their own supplemental load forecasts to reflect local priorities and interventions more accurately. Including Smart Surfaces deployment scenarios, such as widespread adoption of cool roofs and walls, reflective pavements, or expanded tree cover, could show how these technologies reduce peak demand and cooling loads, helping states plan more effectively and mitigate challenges such as rising electricity rates, grid congestion, and supply chain constraints. These load forecasting insights can inform decisions made by Governors, state legislatures, Public Utility Commissions (PUCs), RTOs, utilities, and the private sector, ensuring that infrastructure investments and rate structures account for the full array of load management solutions.

SESPs, which all State Energy Offices developed and continue to update, provide a comprehensive assessment of potential threats to energy security and outline plans to mitigate each hazard. Many SESPs identify extreme heat and flooding as threats to energy infrastructure, and the U.S. Department of Energy's Risk Mitigation Approach Guidebook for SESPs includes "Environmental Management" as a potential mitigation measure, which could potentially include Smart Surfaces like urban meadows, tree planting, or green stormwater infrastructure.[23]

Similarly, although they typically encompass more than just energy, statewide resilience planning efforts offer another valuable avenue for integrating Smart Surfaces into comprehensive resilience strategies. Many State Energy Offices help inform these plans, which typically identify risks like extreme heat, flooding, and sea level rise and outline recommendations for bolstering the state's resilience to those risks. Several states have included nature-based solutions like Smart Surfaces in their mitigation strategies. For example, the 2025 North Carolina Comprehensive Climate Action Plan includes[24] a section focused on nature-based solutions, emphasizing the importance of urban forestry in reducing emissions and building resilience.[25] South Carolina's Strategic Statewide Resilience and Risk Reduction Plan, for which the South Carolina Energy Office served on the Advisory Committee, maps flood-prone areas alongside critical energy infrastructure and explicitly recommends several Smart Surfaces technologies (such as green roofs, rain gardens, bioswales, and permeable pavement) as cost-effective solutions.[26] By incorporating Smart Surfaces into load forecasting efforts, SESPs, and statewide resilience plans, State Energy Offices can help raise awareness of Smart Surfaces, align key stakeholders, and lay the groundwork for how these cost-effective solutions can help address reliability and resilience challenges. To learn more about how Smart Surfaces can fit into various state energy planning processes, see *Incorporating Smart Surfaces into State Energy Planning*.

Policy and Stakeholder Education

State Energy Offices are well-positioned to lead or inform policy development and stakeholder education efforts around Smart Surfaces by collaborating with local governments, utilities and regulators, and private sector partners. By educating local governments about the benefits of Smart Surfaces and supporting the adoption of local cool roof and cool wall codes and other policies, State Energy Offices can help communities unlock significant energy efficiency and peak demand reduction benefits. The Smart Surfaces Policy Tracker contains a searchable database of over two thousand Smart Surfaces policies that could be adapted to meet a local and state government's individual needs, as well as data-driven policy memos and model ordinances. For an in-depth overview of how State Energy Offices can support the integration of Smart Surfaces into building codes, see the NASEO primer on *Incorporating Smart Surfaces into Building Energy Codes*. In addition to working with local governments, State Energy Offices can also engage PUCs and energy efficiency program administrators to update Technical Reference Manuals (TRMs), ensuring Smart Surfaces are recognized as eligible, cost-effective energy efficiency measures.

Beyond policy, State Energy Offices play a vital role in educating key energy users and decision-makers. Targeted outreach to homeowners, MUSH market and commercial building owners, data center developers, and other large energy users can raise awareness of how Smart Surfaces reduce cooling loads and lower electricity bills, especially during peak demand periods. State Energy Offices can also provide utilities with data and case studies on how Smart Surfaces contribute to grid reliability by mitigating urban heat and easing stress on distribution systems. This type of stakeholder education and coordination is essential for advancing Smart Surface interventions across multiple sectors and scales.

Photo by alacatr/istock

Conclusion

Smart Surfaces offer State Energy Offices a timely, cost-effective solution to help meet growing energy reliability and resilience challenges. By integrating these technologies into financing programs, state energy planning efforts, and policy and stakeholder engagement, State Energy Offices can help deliver multiple benefits, from reduced peak electricity demand to lower energy costs and enhanced protection against extreme heat and flooding.

Photo by OakCityDrone/istock

Additional Resources

- Beating the Heat: Recommendations and Considerations for States to Support Cost-Effective Residential Cooling, NASEO, 2024.
- State Action Guide for Energy Resilience Projects Under FEMA's Building Resilient Infrastructure and Communities (BRIC) Program and Other Hazard Mitigation Assistance (HMA) Programs, NASEO, 2022.
- State Governance, Planning, and Financing to Enhance Energy Resilience, NASEO, 2021.
- Smart Surfaces Policy Tracker, Smart Surfaces Coalition and Columbia University Sabin Center for Climate Change Law, 2026.
- Smart Surfaces Guidebook, Carnegie Mellon University Center for Building Performance and Diagnostics, 2022.
- Cooling Cities, Slowing Climate Change and Enhancing Equity: Costs and Benefits of Smart Surfaces Adoption for Baltimore, Greg Kats and Rob Jarrell, 2022.
- Heat Island Community Action Database, U.S. Environmental Protection Agency.
- Resources, Cool Roof Rating Council.
- The Integrated Benefits of Smart Surfaces, Smart Surfaces Coalition.

Endnotes

1 "Long-Term Reliability Assessment," North American Electric Reliability Corporation (January 2026), https://www.nerc.com/globalassets/our-work/assessments/nerc_ltra_2025.pdf.

2 Ettinger, A.K., G.N. Bratman, M. Carey, R. Hebert, O. Hill, H. Kett, P. Levin, M. Murphy-Williams, and L. Wyse, "Street trees provide an opportunity to mitigate urban heat and reduce risk of high heat exposure," Scientific Reports (February 2024), https://doi.org/10.1038/s41598-024-51921-y.

3 "Cool Roofs," U.S. Department of Energy, https://www.energy.gov/energysaver/cool-roofs.

4 Levinson, R. and H. Akbari, "Potential benefits of cool roofs on commercial buildings: Conserving energy, saving money, and reducing emission of greenhouse gases and air pollutants," *Energy Efficiency* (March 2010), https://www.researchgate.net/publication/246974730_Potential_benefits_of_cool_roofs_on_commercial_buildings_Conserving_energy_saving_money_and_reducing_emission_of_greenhouse_gases_and_air_pollutants.

5 Rosado, P. J. and R. Levinson, "Potential benefits of cool walls on residential and commercial buildings across California and the United States: Conserving energy, saving money, and reducing emission of greenhouse gases and air pollutants," *Energy and Buildings* (September 2019), https://doi.org/10.1016/j.enbuild.2019.02.028.

6 "The Atmospheric Window," National Oceanic and Atmospheric Administration, https://www.noaa.gov/jetstream/satellites/absorb.

7 Pirvaram, A., S. N. Leung, P. G. O'Brien, "The Global Warming Potential of Geoengineering via Radiative Cooling," *Advanced Sustainable Systems* (May 2025), https://doi.org/10.1002/adsu.202400948.

8 Munday, J. N., "Tackling Climate Change through Radiative Cooling," Joule (September 2019), https://www.cell.com/joule/fulltext/S2542-4351%2819%2930354-X.

9 Sailor, D., G. Fagliarone, T. Hebrink, and D. Amaripadath, "Field evaluation of the efficacy of passive radiative cooling infrastructure: A case study in Phoenix Arizona," *Building and Environment* (January 2025), https://www.sciencedirect.com/science/article/abs/pii/S0360132324010680?via%3Dihub

10 Goldstein, E., "Reduced Energy Demand for Cooling with the Sky," Advanced Research Projects Agency–Energy and Environmental Security Technology Certification Program (2024), https://www.osti.gov/servlets/purl/2562668.

11 Goldstein, E. "Radiative Sky Cooling-Enabled Efficiency Improvements on Commercial Cooling Systems," California Energy Commission (January 2025), https://www.energy.ca.gov/sites/default/files/2025-01/CEC-500-2025-002.pdf.

12 *Ibid.*

13 Santamouris, M., C. Cartalis, A. Synnefa, D. Kolokotsa, "On the impact of urban heat island and global warming on the power demand and electricity consumption of buildings—A review," *Energy and Buildings* (July 2015), https://doi.org/10.1016/j.enbuild.2014.09.052.

14 Tan, H., R. Kotamarthi, J. Wang, Y. Qian, T.C. Chakraborty, "Impact of different roofing mitigation strategies on near-surface temperature and energy consumption over the Chicago metropolitan area during a heatwave event," *Science of The Total Environment* (February 2023), https://doi.org/10.1016/j.scitotenv.2022.160508.

15 "Cool Surfaces Savings Explorer," Lawrence Berkeley National Laboratory (June 2018), https://basc.pnnl.gov/library/cool-surfaces-savings-explorer.

16 "2026 BNEF Pioneers Finalists Tackle Data Center Sustainability, Flattening the Duck Curve, and Lower-Carbon Commercial Transport," BloombergNEF (February 2026), https://about.bnef.com/insights/clean-energy/2026-bnef-pioneers-finalists-tackle-data-center-sustainability-flattening-the-duck-curve-and-lower-carbon-commercial-transport/.

17 "Spend Less Energy Managing Water," U.S. Environmental Protection Agency (February 2026), https://www.epa.gov/green-infrastructure/spend-less-energy-managing-water.

18 Li , Y. and R. Babcock, "Green roof hydrologic performance and modeling: a review," *Water Science & Technology* (February 2014), https://doi.org/10.2166/wst.2013.770.

19 Shetty, N., R. Hu, B. Mailloux, D. Hsueh, W. McGillis, M. Wang, K. Chandran, and P. Culligan, "Studying the effect of bioswales on nutrient pollution in urban combined sewer systems," *Science of The Total Environment* (2019), https://doi.org/10.1016/j.scitotenv.2019.02.121.

20 Stuart, E. N. Hanus, J. P. Carvallo, P. Larsen, "U.S. ESCO Industry: Industry Size and Recent Market Trends," Lawrence Berkeley National Laboratory (June 2021), https://eta-publications.lbl.gov/sites/default/files/lbnl_esco_market_study_07june2021_-_nh.pdf.

21 "A Vision for Community Resilience Hubs in the District of Columbia," District of Columbia Department of Energy and Environment, https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/DC%20Resilience%20Hub%20Program%201-Pager.pdf.

22 "Climate Ready DC: Resilient Design Guidelines," District of Columbia Department of Energy and Environment, https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/CRDC%20resilient%20design%20guidelines_FINALApproved.pdf.

23 "Risk Mitigation Approach Guidebook for State Energy Security Plans," U.S. Department of Energy Office of Cybersecurity, Energy Security, and Emergency Response (August 2024), https://www.energy.gov/sites/default/files/2024-08/DOE%20Risk%20Mitigation%20Approach%20Guidebook%20for%20States_0.pdf.

24 "North Carolina Comprehensive Climate Action Plan," North Carolina Department of Environmental Quality (December 1, 2025), https://www.deq.nc.gov/state-energy-office/cprg-ccap-final-report/open.

25 *Ibid.*

26 "Office of Resilience Publishes State's First Strategic statewide Resilience and Risk Reduction Plan," South Carolina Office of Resilience (June 29, 2023), https://scor.sc.gov/news/2023-06/office-resilience-publishes-states-first-strategic-statewide-resilience-and-risk.

NASEO
National Association of
State Energy Officials

1812 North Moore Street, Suite 1810, Arlington, Virginia 22209 | 703.299.8800 | www.naseo.org