Build Community Power

Part 1 of the Local Energy Policy Toolkit

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ILSR INSTITUTE FOR Local Self-Reliance

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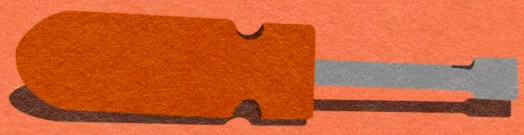

Set Equitable Energy Goals

Cities with **climate** and **clean energy goals** should center historically marginalized residents and prioritize locally owned clean energy projects to **maximize local economic impacts**.

Cities can develop more equitable and impactful clean energy and climate plans by:

- Engaging community members in decision-making and goal-setting processes early and often.
- Focusing climate and energy goals on serving low-income and other historically marginalized residents.
- Developing frameworks and definitions — e.g., for "historically marginalized communities" — that are specific to the local context.
- Setting local or on-site energy generation goals or requirements.
- Setting local workforce targets.
- Focusing on strategies that leverage existing powers and authority.

Cities Take Action | Set Equitable Energy Goals

See how cities are taking climate and clean energy plans to the next level in the examples on the following pages.

PHOTO CREDIT: MATT ASHWORTH VIA PEXELS

LOUISVILLE, KENTUCKY

In Louisville, city leaders designed energy goals to acknowledge and begin to address the disproportionate impacts of climate change on marginalized communities.

In 2020, the Louisville Metro Council adopted the **goal of 100 percent clean energy** community-wide by 2040. The **non-binding resolution** also urged the development of a Climate Action Plan and the updating of Metro Government's priorities in accordance with clean energy generation. In particular, the resolution stressed the development of more just, equitable and sustainable energy systems and the facilitation of more democratic energy ownership.

The city identified and engaged a wide range of stakeholder groups through surveys, interviews, and community meetings — with a specific focus on low income and disadvantaged communities — to inform a suite of plans and reports, which include the **Climate Change Vulnerability Assessment**, the **Greenhouse Gas Emissions Reduction Plan**, the **Prepare Louisville Climate Adaptation Plan**, and the **Priority Climate Action Plan**.

"So if you actually look to the text of our resolution...it's very specific about calling for underserved communities to be brought into the political process to develop more just, equitable and sustainable energy systems."

Hear former Metro Councilman Brandon Coan discuss how Louisville's renewable energy goals intersect with racial justice in **episode 117** of the Local Energy Rules Podcast.

PHOTO CREDIT: BDS2006 VIA WIKIMEDIA (CC BY 3.0)

LOS ANGELES, CALIFORNIA

In **2016** and **2017**, the Los Angeles City Council directed its municipal power utility, the **Los Angeles Department of Water and Power**, to determine technically feasible pathways towards an equitable 100 percent renewable energy standard.

The utility responded by developing the **LA100** plan as a roadmap for Los Angeles's transition to 100 percent carbon-free power by 2035. Every two years, the LA100 Plan is developed

with robust stakeholder engagement from a local Advisory Group, which is designed to reflect diverse perspectives and expertise.

In 2023, the municipal utility partnered with the **National Renewable Energy Laboratory** and UCLA to release the **LA100 Equity Strategies study**, using a stakeholder-driven approach to analyze equity and justice within the city's energy system.

While the study found that the current energy system in Los Angeles was inequitable for a number of reasons, it outlined a number of strategies for improvement, such as expanding shared solar, upgrading distribution grids, and engaging with the community.

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PROVIDENCE, RHODE ISLAND

In place of a typical climate action plan, the city of Providence has created a **climate justice plan** focused on frontline communities — defined as "communities of color most impacted by the crises of ecology, economy, and democracy".

Providence sought climate goals and implementation strategies from the local community, especially those most vulnerable to the climate crisis.

Due to its distinct approach and its engagement with frontline communities, Providence's climate goals differ from those of many other cities. The city has a goal of net zero carbon by 2050, but is more strongly focused on the priorities of the community, including reducing other forms of air pollution, eliminating utility shutoffs, and generating 30 percent of Providence's energy locally.

"Let's start with emissions that are causing the most harm in our frontline community so we can prioritize their health as a first step."

Hear Leah Bamberger, former Providence Director of Sustainability, explain the process of building the city's climate justice plan in **episode 93** of the Local Energy Rules Podcast.

PHOTO CREDIT: MICHAEL HICKS VIA FLICKR (CC BY 2.0)

ST. LOUIS PARK, MINNESOTA

Youth activism played a considerable role in the development of St. Louis Park's climate goals. The city was spurred into action in 2015 by high school activists who brought the Council a report card grading their climate action efforts at a B minus. They suggested that the Council create a climate action plan and set a target for net zero emissions, along with giving a voice to youths like themselves.

In 2016, the Council responded with the Community Planning Guide, which included two seats on the environment and sustainability commission reserved for young people, a building energy benchmarking ordinance, a **rooftop solar cost share program**, and special consideration for minority-owned businesses and low-income residents under several programs.

St. Louis Park's **Climate Action Plan**, passed in 2018, aspires to achieve carbon neutrality by 2040, in part by installing more solar energy in the city. Accompanying the main goal are several midterm goals that will reduce the city's overall carbon emissions by 55 percent by 2030, including a goal of 100 percent renewable electricity and a goal for 10 percent of electricity consumption to be powered by local solar.

"We really don't want climate action to be something that only wealthy people can afford to do."

Hear Emily Ziring, St. Louis Park Sustainability Manager, discuss taking climate action in a small city in **episode 128** of the Local Energy Rules Podcast.

Tools | Set Equitable Energy Goals

More on city 100 percent renewable goals:

- → **Local Energy Rules Podcast Series: Voices of 100%**
- → **Investigating City Commitments to 100% Renewable Energy: Local Transitions and Energy Democracy**
- → **Ready for 100% Map** (last updated 2022)

Resources on climate and energy planning:

- → **Climate Action Planning Guide**
- → **Equity in Climate Planning: Trends and Best Practices for U.S. Local Governments**
- → **Broadly Beneficial Clean Energy Planning Project**
- → **From Community Engagement to Ownership: Tools for the Field with Case Studies of Four Municipal Community-Driven Environmental & Racial Equity Committees**

Examples from other cities:

- → **All Cities with Climate Action Plans** (some links broken)
- → **Mapped: Cities with a Climate Action Plan**
- → **Community-Wide Energy Goals** and **Local Government Climate and Energy Goals**

Build City Clean Energy Projects

Cities can develop and procure their own clean energy projects to reduce the local government's energy costs, provide clean power to their residents, increase community resilience, and promote local economic development.

All communities have opportunities to invest in local clean energy, even if they don't operate their own **municipal electric utility**. For example, city governments can install solar on public buildings, transition streetlights to efficient LEDs, and electrify the municipal vehicle fleet.

One innovative option for cities that want to advance clean heating and cooling is **networked geothermal**. Networked geothermal systems use the stable temperature of the earth to heat and cool multiple buildings using the same infrastructure, which makes it cheaper than individual systems.

City ownership of clean energy projects **maximizes local benefits**, when compared to third-party-owned options.

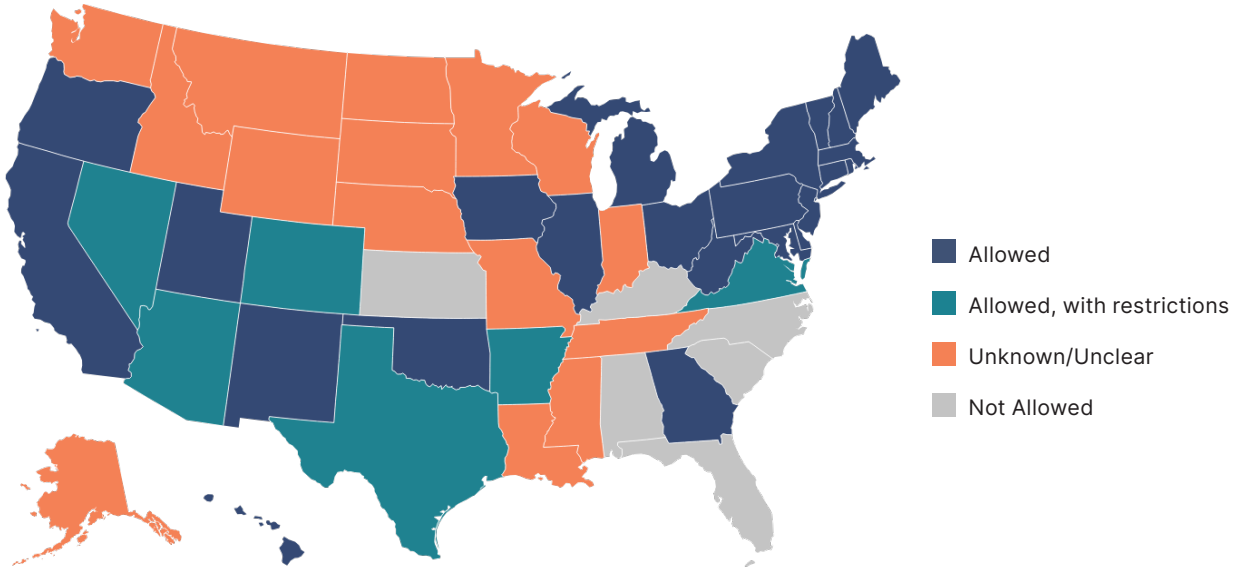
Despite legislation signed in 2025 that dramatically **restricts federal incentives** that helped local governments directly own solar and wind energy projects, **certain tax credits remain available** — **especially for geothermal and battery storage projects** — with **additional limitations**.

Communities that can't or don't want to own energy projects directly can still turn to **third-party ownership** options — as long as state rules allow them. Instead of developing and owning, say, a solar array itself, the city can either lease the array from a third-party developer or enter into an agreement to purchase the energy the installation produces.

To ensure new clean energy projects create good, local jobs, cities can incorporate requirements on local hiring, job quality, minority-owned businesses, and other labor considerations into their construction plans or requests for proposals. In addition, cities can negotiate or mandate **Community Benefits Agreements** for projects to maximize positive impacts and give community members a seat at the table.

State Authorization of Third Solar Party Power Purchase Agreements

More than half of all states allow third party power purchase agreements for solar energy. Other states disallow third party power purchase agreements or have unclear rules.



MAP: INSTITUTE FOR LOCAL SELF-RELIANCE | DATA: DSIRE | CREATED WITH DATAWRAPPER

Cities Take Action | Build City Clean Energy Projects

Learn about city-led clean energy projects in the map below.

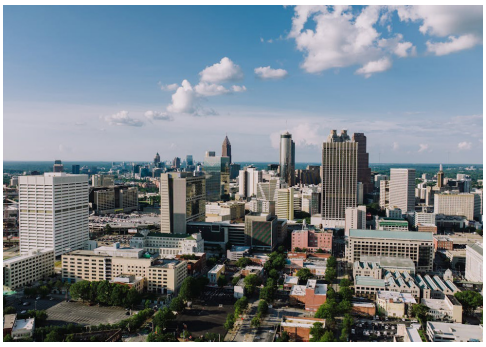


PHOTO CREDIT: KELLY VIA PEXELS

ATLANTA, GEORGIA

Atlanta has installed **rooftop solar panels on dozens of city buildings** since 2017, which are projected to **save the city $8 million** in lower electric bills.

The rooftop solar panels are located on recreation centers, fire stations, and other city buildings, and together they have a capacity of 2.8 megawatts. Atlanta began the effort in order to reduce energy costs and help meet its goals of 100 percent renewable energy citywide and for municipal operations.

Atlanta took advantage of changes in state law to partner with a local solar company and buy the energy at a **lower fixed rate with no upfront costs**. The company installs, operates, and owns the systems and then sells energy back to the city under a Solar Energy Procurement Agreement (also known as a **power purchase agreement**).

In addition to rooftop solar, Atlanta is also pursuing energy efficiency improvements and renewable energy credits to transition the city to 100 percent renewable energy.

"Leading the way [by figuring] out how this framework works for solar is helping other consumers who may not have the resources that we as a city have."

Hear Megan O'Neil, former Energy Programs Manager for the City of Atlanta, discuss Atlanta's strategy for building clean energy back in 2018 on **episode 62** of the Local Energy Rules Podcast.

PHOTO CREDIT: DEAN HOCHMAN VIA FLICKR (CC BY 2.0)

KANSAS CITY, MISSOURI

Kansas City installed solar on its municipal buildings in partnership with two local power companies. Kansas City installed solar on its municipal buildings with the partnership of two local power companies and the help of a utility solar incentive. In the early 2010s, Kansas City entered into separate 20-year leases with the local utility and another power company, who each agreed to buy the solar materials, install them on the buildings, and guarantee a certain amount of solar production for the city. Through these agreements, Kansas City was able to host 1.5 megawatts of solar in **59 separate installations on municipal properties**.

In recent years, the city has continued to look for new ways to expand its solar prospects. A **feasibility study identified over 3,100 acres of vacant land** at the Kansas City International Airport that would be **suitable for a solar panel installation**. This installation could have a capacity of up to 500 megawatts and would be the **largest municipal solar farm in the nation**.

"Because we are saving in the amount of energy that we're getting from our local utility, [solar is] worthwhile."

Hear Charles Harris, project manager with Kansas City, discuss how Kansas City made solar possible back in 2015 on **episode 25** of the Local Energy Rules Podcast.

PHOTO CREDIT: MICHAEL BARERA VIA WIKIMEDIA (CC BY-SA 4.0)

MILWAUKEE, WISCONSIN

A wind turbine along Milwaukee's skyline has far exceeded initial estimates of clean energy production and cost savings for the city. Milwaukee installed the project in 2012 at a **municipal building**, employing a **mix of grant funding** and sourcing many of the components from Wisconsin firms **to boost jobs within the state**.

The turbine provides over 100 percent of electricity needs for the city's Port Administration Building, with surplus clean energy going back to the power grid. In total, it has **saved the city approximately $200,000**, generated over 1.4 million kilowatt-hours of clean power, and **prevented the release** of over 1,025 metric tons of carbon dioxide into Milwaukee's air. The city has **examined the feasibility** of expanding its wind power usage by building more turbines, such as in Lake Michigan, but currently has no plans to do so.

Along with wind power, Milwaukee has invested in clean energy through solar panels and solar hot water systems. The city has over **15 solar installations** on municipal buildings and land, including rooftop solar on public libraries and one ground-mounted installation on a former landfill site. Additional solar projects were **put on hold in 2019**, after the local electric utility **blocked interconnection** of the proposed systems.

PHOTO CREDIT: PAUL SABLEMAN VIA FLICKR (CC BY 2.0)

WEST UNION, IOWA

The City of West Union has developed a unique community-owned shared geothermal system. It was completed in 2012 as part of a Green Streetscapes project proposed and partially funded by the Iowa Economic Development Authority. Along with the geothermal system, the project included replacement of existing streets with porous paving, bioswales, a civic plaza, sidewalks, and street lighting.

The public geothermal infrastructure is owned by the City of West Union and managed by the West Union District Energy LLC. The eleven members of the LLC are the owners of buildings which use the system's energy. Each month, the members pay a user fee based on their building's demand. This system reduces energy spending for users, leading to cost savings and more local wealth retention along with less pollution.

Tools | Build City Clean Energy Projects

ILSR resources on city clean energy projects:

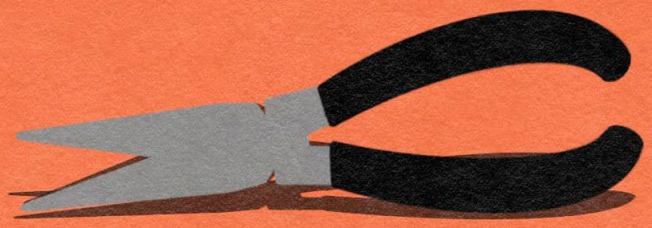
- → **Public Rooftop Revolution Report**
- → **Clean Heat Resources**
- → **Local Ownership Resources**
- → **Local Energy Rules Podcast: These Solar Tax Credits Are Still Standing**

Guides for city clean energy development and procurement:

- → **SolSmart Solar Energy Toolkit: Development on Public Facilities and Under-Utilized Land**
- → **Local Government Procurement Guidance** (especially **On-Site Solar guidance**)
- → **Labor Considerations for Clean Energy Procurement**
- → **Community Benefits Agreements for Solar Development Resource Guide**

Model requests for proposals:

- → **On-Site Solar Request for Proposal (RFP) Template**
- → **Request for Proposals Template** (Maine)
- → **Model RFP for Solar** (Minnesota)



Raise Funds for Community Energy Projects

Local governments can raise money for community-led clean energy projects by leveraging many of the same funding mechanisms used for other local infrastructure projects and expenses.

Establishing new taxes and fees (or increasing or reallocating existing ones) is one option to help fund community projects. These include sales taxes, payroll taxes, utility taxes, property taxes, local fines, and carbon fees.

City officials can opt to target particular industries or transactions, such as taxes levied on large corporations or fees on companies that create carbon emissions or air pollution. However, voters may need to approve these charges via a local referendum, and states may **restrict the taxation ability** of local governments (sometimes preventing cities from exploring more progressive taxation options, such as income taxes).

In addition, cities in some states can negotiate with the local utility company for added charges on utility bills, as part of a franchise agreement between the city and the utility. Learn more about this option in Part 2 of the Local Energy Policy Toolkit.

To supplement or replace these local fees, cities can explore other financing resources, such as state or federal grants, charitable contributions, municipal bonds, and revolving loan funds.

Once cities have identified a funding source, they must decide how to allocate the money. To achieve equitable and effective outcomes, local governments should engage community members and organizations in the decision-making process — especially those from neighborhoods that have experienced historic underinvestment or environmental harms.

Cities Take Action | Raise Funds for Community Energy Projects

Find out how cities across the country are leveraging their authority to fund local projects in the examples below.

ANN ARBOR, MICHIGAN

In 2022, voters in Ann Arbor overwhelmingly approved a 20-year **millage property tax increase** for community climate action. Under the millage, a property with an average taxable value of $125,000 would pay an additional $125 annually. The millage is expected to generate upwards of $6.8 million each year.

Funding from the **Community Climate Action Millage** will support Ann Arbor's goal of achieving a just transition to community-wide carbon neutrality by 2030. Revenue from the millage is **authorized to be used for specific climate-focused causes**, including community clean energy programs, energy efficiency upgrades for residents, and discounts for accessing renewable energy.

In addition to the millage, Ann Arbor has considered several other methods to raise funds for climate action. These include an **internal carbon tax** and a **climate pollution impact fee**. Along with providing revenue to address the city's climate goals, these policies would incentivize clean energy by raising the price of carbon emissions.

BOULDER, COLORADO

Boulder's **Climate Tax** raises a projected $6.5 million annually for the city's climate efforts by collecting a fee on customers' electric and gas bills. The Climate Tax is a combination and replacement of two previous taxes: the Climate Action Plan and the Utility Occupation Tax. The new tax, which voters approved in 2022, was designed to simplify the city's climate investments and address inequities created by the previous taxes.

Revenue from the Climate Tax is spent on **new or ongoing projects for climate resilience and mitigation**. The type of projects varies widely, including direct cash assistance to homeowners for energy efficiency upgrades, large-scale renewable energy systems, and the advancement of nature-based solutions such as forest restoration for carbon capture.

Funding also supports the continuation of programs such as EnergySmart, a **county-run service which helps community members understand and improve their homes' energy efficiency**.

In addition, Climate Tax revenue supports the salary of a city distribution engineer, who helps manage and develop clean energy projects at municipal facilities and advocates for helpful policies at the Colorado Public Utilities Commission.

MINNEAPOLIS, MINNESOTA

Minneapolis' **Green Cost Share** program takes revenue from utility franchise fees and fees on polluting businesses and redirects them toward community clean energy investments.

The Cost Share program collects two types of fees: the **pollution control registration**, paid annually by companies based on the pollution they create, and the franchise fee, paid by utilities that do business in the city.

Since 2013, the program has **invested over 19 million dollars** into various clean energy projects, including more than 24 megawatts of solar. When combined with other rebates and federal incentives, Cost Share is able to cover up to 90 percent of a project's costs.

The program has successfully expanded over the years as the city has gradually increased its franchise fee for large utility companies and provided additional investment through the **Climate Legacy Initiative**. In 2024, Green Cost Share contributed to more than 1,000 projects and over 4,700 metric tons of reduced carbon dioxide emissions, with thousands of dollars in annual energy bill reductions for participants.

With the help of community groups, the City of Minneapolis has identified neighborhoods facing high levels of pollution along with racial, economic, and political marginalization, designating them as **Green Zones**. Applications for funding in Green Zones are prioritized and are twice as likely to be approved as other applications.

"As we're re-investing these funds...how do we use that money to reduce the energy burdens and how do we use that money to help build wealth?"

Hear Patrick Hanlon, former Director of Environmental Programs for the Minneapolis Health Department and current Deputy Commissioner of Sustainability, discuss the benefits of the Green Cost Share and its potential for expansion in **episode 121** of the Local Energy Rules Podcast.

PORTLAND, OREGON

Portland is using a small surcharge on big businesses to fund $1.7 billion in community-led clean energy projects. The **Portland Clean Energy Community Benefits Fund** originated from a **successful 2018 ballot initiative** supported by a coalition of community organizations.

The Clean Energy Community Benefits Fund is supported through a one percent business license surcharge on very large businesses that collect one billion dollars of revenue nationally, with at least $500,000 in revenue collected in Portland itself. Utilities, medical suppliers, and certain food items are exempt from the charge, to avoid passing costs on to consumers.

The revenue is invested based on the program's **Climate Investment Plan**, a five–year roadmap for climate action. The goal of the Fund is to support social, economic, and environmental benefits for all Portlanders, particularly those who are most impacted by climate change. The fund and its steering committee are rooted in their local community, with the objective of advancing equity and energy justice.

Since the launch of the program, the Fund has helped to install energy efficiency upgrades in 18,000 homes, generate over 500 megawatt-hours of renewable energy annually, and reduce energy costs for thousands of families and community institutions, according to **public data tracking**.

The majority of program funds are spent on Strategic Programs, which are **targeted initiatives to address shared government and community priorities**. Remaining funds are awarded to community-led projects through **Community Grants**. Program

staff score proposals according to a set of criteria based on the fund's **guiding principles** and award grants to the highest scorers.

"[We] championed community organizations and pockets of the community that maybe were often overlooked in other parts of city government."

Hear Maria Sipin, former volunteer committee member and current Chief of Staff for City Councilor Mitch Green, discuss the program in **episode 190** of the Local Energy Rules Podcast.

PHOTO CREDIT: DANIEL SCHWEN VIA WIKIMEDIA (CC BY-SA 4.0)

SEATTLE, WASHINGTON

Seattle's **Jumpstart payroll tax** charges big businesses in the city to raise hundreds of millions of dollars each year for community investments. Starting in 2021, Jumpstart targeted employers with payroll expenses over $7 million, with the threshold increasing annually according to inflation. As of 2025, the tax rate is between 0.7 percent and 2.6 percent, depending on the company's total payroll expenses and compensation for its highest paid employee.

The Seattle City Council **passed the Jumpstart tax legislation** in 2020. A broad coalition of community organizations — including labor groups, homeless service providers, climate advocates, and even some businesses — supported the new Jumpstart tax. The tax faced opposition from many corporations, surviving a legal challenge from the Chamber of Commerce.

In the same year, the City Council also approved a **spending plan** that directed the raised funds to myriad causes in Seattle, including low-income housing projects, economic revitalization, Seattle's **Equitable Development Initiative**, and funding for **Green New Deal** programs.

"We can't keep continuing to squeeze every day people who are not responsible for these climate disasters... We really should be going to the top 1 percent or the corporations."

Hear Jill Mangaliman, former Executive Director of Got Green, discuss Seattle's hopes for the Jumpstart tax in **episode 119** of the Local Energy Rules Podcast.

Tools | Raise Funds for Community Energy Projects

City revenue options for local energy action:

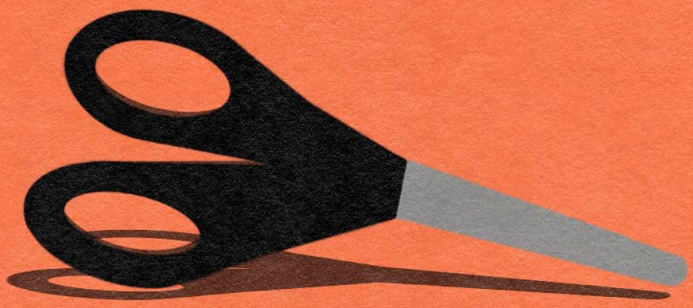
- **How Can Local Governments Pay for Climate Action?**
- **6 Innovative Ways to Fund Climate Action and Equity in US Cities**
- **How Cities Can Put a Price on Carbon**

More on state restrictions on local taxing authority:

- **Easing State Restraints on Local Taxing Power Can Strengthen Democracy, Promote Prosperity and Equity** (especially **Appendix 5: Local Taxing Authority and Limits by State**)

Examples from other cities:

- Property taxes in **Ann Arbor, Michigan** and **Orange County, North Carolina**
- Payroll tax in **Seattle, Washington**
- Sales taxes in **Albany, California**; **Denver, Colorado**; and **Fort Collins, Colorado**
- Business surcharge on large retailers in **Portland, Oregon**
- Utility/fossil fuel taxes in **Boulder, Colorado** and **Long Beach, California**
- Pollution fee in **Minneapolis, Minnesota**



Boost the Clean Energy Market

By leveraging their authority over zoning, permitting, and building codes and establishing financial incentives and programs, cities can help local residents, businesses, and institutions adopt clean and efficient technologies.

For instance, many local governments have passed policies to remove barriers to going solar. Simplified and consistent permitting and zoning requirements make it easier for residents to get permission to install solar panels. And automated, online permitting software, **such as SolarAPP+**, can make it even faster and more cost-effective for cities to permit residential rooftop solar.

Pro-solar ordinances can enact these permitting and zoning improvements, along with other boosts to local rooftop and ground-mounted solar development. Cities can even implement solar or solar-ready mandates for new buildings that require developers to either install rooftop solar panels or to design the building to easily host panels in the future.

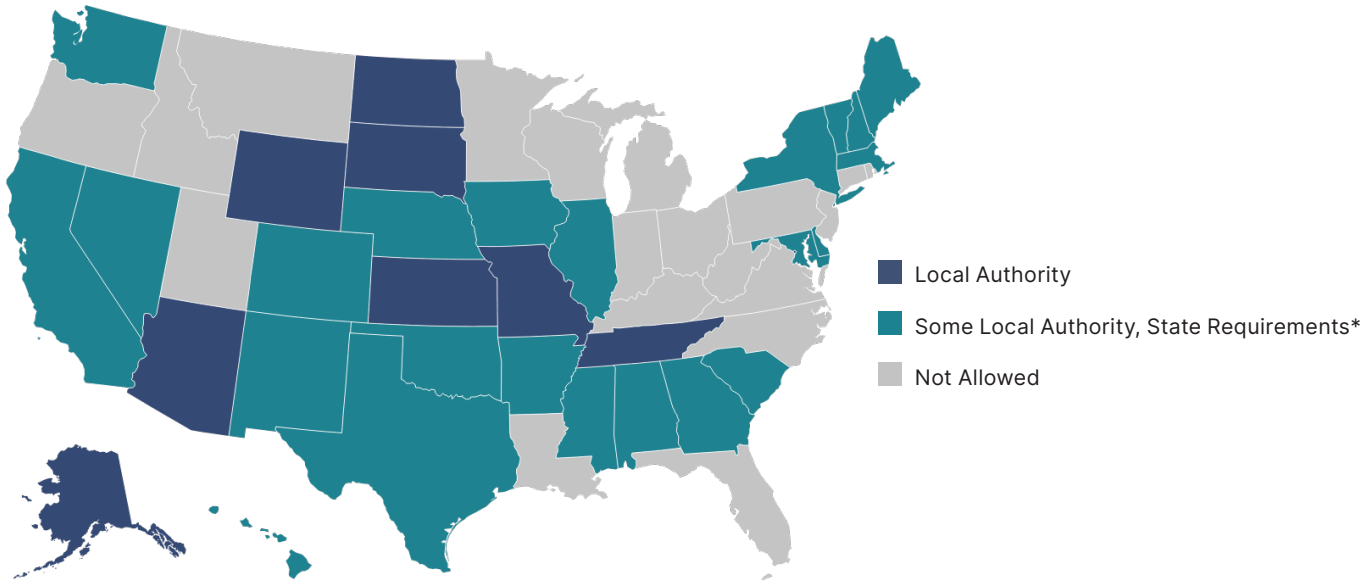
In some cases, cities can update local building codes to require energy efficiency, renewable energy, and electrification measures, including restricting gas in new buildings. (Learn more about banning gas in Part 2 of the Local Energy Policy Toolkit.) State laws can affect how much authority local governments have to set code requirements that are stricter than the state's.

Cities can also create financing programs and incentives — such as rebates and group purchasing — to further help residents and businesses afford these technologies. These offerings can apply to rooftop solar, electric vehicles and e-bikes, electric home appliances, and more. Some local (and state) governments have created Sustainable Energy Utilities to administer these programs.

These efforts to support the market are particularly effective if they aim to improve access to clean energy for communities that have historically benefited less from it, such as renters, low-income households, and people of color. They can also be combined with other strategies in this toolkit, including **municipal clean energy projects** and **revenue-raising fees and taxes**, to maximize local impacts.

Local Building Energy Code Authority

In the majority of states, local governments have at least some ability to adopt their own building energy codes or to adopt codes that exceed the state standard.



* This category includes states that permit local adoption of state stretch codes, local amendments, and/or other variations to state codes. State requirements or local code authority may only apply to residential or commercial construction.

MAP: INSTITUTE FOR LOCAL SELF-RELIANCE | DATA: ACEEE STATE & LOCAL POLICY DATABASE | CREATED WITH DATAWRAPPER

Cities Take Action | Boost the Clean Energy Market

See how cities are breaking down barriers to clean energy for local residents in the examples below.

PHOTO CREDIT: OLEG ALEXANDROV VIA WIKIMEDIA (CC BY-SA 3.0)

FREMONT, CALIFORNIA

In Fremont, local officials have worked to advance access to solar for city residents, making it the first-ever **SolSmart Platinum designee**. The city was recognized in part due to its adoption of **SolarAPP+**, a standardized plan review software which enables instant permitting for residential rooftop solar. The adoption of SolarAPP+ was accompanied by the passage of **pro-solar ordinances** designed to preserve solar access.

Additionally, Fremont has **connected affordable housing developers to opportunities** like California's **Solar on Multifamily Affordable Housing** program and partnered with Habitat for Humanity on low-income home energy upgrades.

As of 2023, Fremont was home to nearly 10,000 on-site solar installations, totaling over 67 megawatts of capacity.

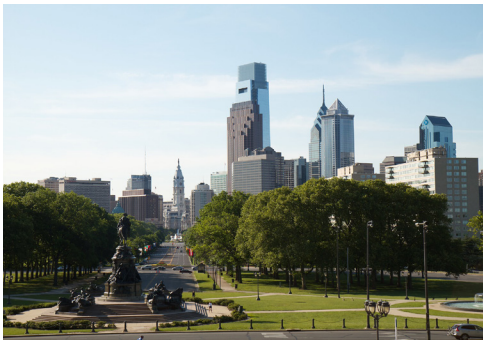


PHOTO CREDIT: ROB SHENK VIA FLICKR (CC BY-SA 2.0)

PHILADELPHIA, PENNSYLVANIA

The **Philadelphia Energy Authority** has worked to boost the city's clean energy market through a combination of financial programs and other incentives. Through the Philadelphia Energy Campaign, the Authority has invested one billion dollars in the city's clean energy economy, **creating more than 8,400 jobs and saving over $200 million in energy costs**.

The Philadelphia Energy Authority launched the largest city-backed solarization initiative in the nation, **Solarize Greater Philadelphia**. The initiative connects residents with vetted solar installers that provide discounted installations and ensure consumer protections. Through the initiative, Philadelphians have installed over 22 megawatts of solar energy capacity.

In 2021, the Philadelphia Energy Authority established the **Philadelphia Green Capital Corp.**, a green bank that connects clean energy projects with capital resources and financing tools (including **Philadelphia's Commercial Property-Assessed Clean Energy Program**). The green bank's Share the Sun program **subsidizes solar installations for low- and moderate-income residents** with the proceeds from donated Solar Renewable Energy Credits.

Previously, Philadelphia offered a **rebate for solar** installed on residential and commercial properties, with a **portion of funds reserved for low- and moderate-income households**.

PHOTO CREDIT: BILL MORROW VIA FLICKR (CC BY 2.0)

TUCSON, ARIZONA

The city of Tucson makes use of **mandatory design features** in its municipal building and zoning codes to remove barriers to clean energy.

In 2008, the Mayor and City Council voted to require that all new residences be built **solar ready**. Solar readiness includes leaving appropriate space on rooftops for solar panels to be installed, as well as accounting for the added weight. In addition, builders must either install a solar water heating system or leave the water heater accessible in case a future resident decides to install one. These **building modifications have little to no additional cost for builders**, and they help residents avoid an expensive retrofitting process.

Along with solar, Tucson has made changes to its municipal codes to make sure residential and commercial buildings are **electric vehicle friendly**. As part of the requirements, **new homes** with parking spaces must have electric wiring and infrastructure in place for vehicle charging. New **multifamily and commercial buildings** must also have certain quantities of parking spots that are electric vehicle ready or have charging stations.

PHOTO CREDIT: JOSEPHMCCOWIE VIA FLICKER (CC BY-NC 2.0)

WASHINGTON, D.C.

Washington, D.C., is home to the **District of Columbia Sustainable Energy Utility**, which is dedicated to making energy efficiency and clean energy more accessible through technical assistance and financial support. Since 2011, the Sustainable Energy Utility has contributed to more than $1.4 billion in lifetime energy cost savings and the reduction of over 7 million metric tons of lifetime greenhouse gas emissions. Funding comes from several **energy development** funds collected by the city government.

The Sustainable Energy Utility has a number of **programs and services** to help District residents and businesses transition to clean energy. The **Solar for All community solar program** partners with local developers to design and install solar systems on commercial and multifamily properties. Other programs are designed to incentivize home energy upgrades, such as **affordable electrification**.

The Sustainable Energy Utility also offers workforce development and training opportunities for contractors and job seekers in the clean energy industry. Many of the programs focus on underserved communities through partnerships with schools and community-based organizations.

Tools | Boost the Clean Energy Market

Strategies to boost local solar:

- **SolSmart Program Guides** (Including Toolkits on **Market Development and Finance**, **Permitting and Inspection**, and **Planning and Zoning**)
- **SolarApp+ Automated Permitting Platform**
- **Overcoming Permitting Barriers for Rooftop Solar in Minnesota**
- **Solar Energy Siting: Model Ordinances**

Information on buildings and codes:

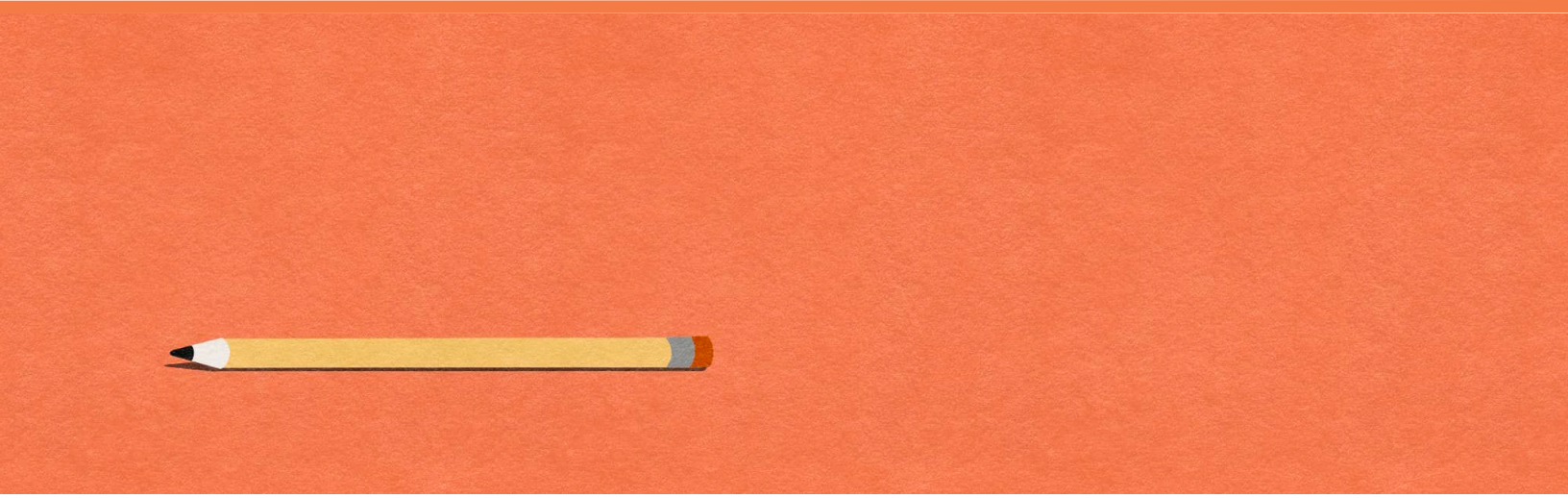
- **Codes and Policy: Tools and Guides**
- **Energy Codes and Affordability**
- **New and Existing Buildings: Model Policies, City Examples, and Other Resources**
- **Energy Equity for Homeowners** and **Energy Equity for Renters** (Local Government Guides and Examples)
- **Using Renewable Energy Mandates to Accelerate Building Decarbonisation**

More on transportation and electric vehicles:

- **Charging Smart Program Guide**
- **Clean Transportation: Model Policies, City Examples, and Other Resources**

Other resources on supporting clean energy:

- **Distributed Wind Smart Program Guide**
- **Utility-scale and Distributed Energy: Model Policies, City Examples, and Other Resources**
- **Green Banks, PACE Programs, and Other Financing and Incentive Resources**



Leverage a Municipal Utility

Local governments that operate their own electric or gas utilities have even more avenues to invest in clean energy, address residents' energy burdens, and prioritize community benefits and participation.

Municipal utilities have control over where their energy comes from. These public utilities can decide to develop their own clean energy projects and/or buy energy from third-party wind or solar farms to power their communities. However, municipal utilities may be **limited by power supply contracts** with their suppliers that restrict the amount of electricity they can generate themselves or procure from other sources.

Municipal leaders can maximize the beneficial impact of these projects by implementing robust community engagement processes, prioritizing local hiring and workforce development, designing projects for community resiliency, and more.

Similarly, a municipal utility can encourage local residents and businesses to install clean energy through enabling policies, such as rooftop solar **net metering**, **community solar programs**, and **distributed power plants**. These policies compensate people for the electricity that their projects share with the utility's grid and promote greater local energy development.

Communities with public utilities can also take advantage of their power over rates and billing processes to address energy affordability and insecurity. **Inclusive utility investment programs** can help residents pay for home upgrades for efficiency and comfort without going into debt or facing upfront costs. Prohibitions on utility disconnections keep households from losing access to lifesaving energy.

Though their options are more limited, cities currently served by an **investor-owned utility** have other opportunities to exert their authority over local energy use, such as by forming a community choice energy entity or even taking over the local utility. These pathways are explored further in Part 2 of the Local Energy Policy Toolkit.

Cities Take Action | Leverage a Municipal Utility

See how cities with public power are taking advantage of their municipal utility to create clean energy solutions for their residents.

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BURLINGTON, VERMONT

The small city of Burlington became the **first in the nation** to be powered by **100 percent renewable electricity**, thanks to its municipal electric utility.

Burlington Electric Department hit the 100 percent mark in 2014 when it purchased a hydroelectric power plant. The **rest of its renewable energy** comes from a municipal wood-burning plant and city solar energy installations; contracts for wind, solar, and hydroelectric power; customer-owned solar and wind facilities; and renewable energy credits.

Now, the city is aiming to **reach net-zero-carbon energy** by 2030 by eliminating fossil fuel use for building heating and cooling and for transportation. If Burlington achieves its goal, it would be the first net-zero-carbon energy city in the United States.

"It's not an accident that it was a city with a publicly owned utility that got [to 100 percent renewable] first."

Hear former Mayor Miro Weinberger how the city utility has made Burlington's clean energy goals possible and how equity plays a role in **episode 90** of the Local Energy Rules Podcast.

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FORT COLLINS, COLORADO

Fort Collins Utilities's **Epic Homes program** connects city residents to home energy efficiency information and funding programs.

Fort Collins **first established** a Home Efficiency Loan Program in 2012. The city partnered with a credit union to lend money to residents for home energy upgrades that the residents could then repay via charges on their municipal electric bills.

In 2018, Fort Collins Utilities revamped the program as Epic Homes to incorporate other services — including energy advising, energy assessments, and rebates — in addition to the

loan program. The **Epic Homes Loan** allows utility customers to borrow as much as $50,000 to install efficiency measures, solar panels, and/or battery storage and then repay the loans on their utility bills. The city also provides rebates for these **energy efficiency** and **clean energy upgrades**.

From 2013 through 2020, Fort Collins's on-bill financing programs issued **more than $2 million in loans with no defaults**.

While the Epic Homes Loan does have a **modest minimum credit score requirement**, programs such as Pay As You Save® enable even **more inclusive customer participation** by removing credit checks and extending funding to renters.

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LOS ANGELES, CALIFORNIA

Having a publicly owned utility has allowed Los Angeles to respond to residents' energy needs in innovative ways.

In 2022, Commissioners for the Los Angeles Board of Water and Power **passed a motion** directing the utility to discontinue shutoffs for low-income customers who have fallen behind on their bills. It also ended utility shutoffs during extreme weather for all customers, whether they are eligible for income-based protections or not.

Community members and organizations **pushed for the ban on shutoffs**, arguing that access to utility services is a human right and pointing to data that shutoffs disproportionately affect low-income and Black and Latino households.

In another example, Los Angeles has taken advantage of its municipal electric infrastructure to **install hundreds of public electric vehicle charging stations** on **city streetlights**. The Bureau of Street Lighting partnered with the municipal utility and other city departments to install the charging stations, increasing access to electric vehicle charging for residents who can't charge their cars at home, including many renters. Los Angeles has **far outpaced other U.S. cities** in providing widespread and inclusive curbside charging opportunities.

RIVER FALLS, WISCONSIN

Because of its municipal utility, the small city of River Falls is able to offer community solar subscriptions to its residents, even in the absence of state enabling legislation.

River Falls Community Solar allows local residents and businesses to purchase shares in the community solar project and receive the value of the electricity that their share of the panels produce as credits on their bills. Loans are available without credit checks to help with the upfront costs of community solar shares.

Unlike communities served by investor-owned utilities, River Falls didn't need to wait for state policymakers to create a community solar program and force the utility to make this option available. Instead, the city was able to partner with its nonprofit electric wholesale provider to deploy and operate the program.

In addition, River Falls Municipal Utility offers financial incentives for residents and businesses that install their own solar panels.

Tools | Leverage a Municipal Utility

General information on municipal utilities:

- → ILSR's Public Power Resources
- → Where Is Public Power
- → Coming Together for Equitable Public Power

More on clean energy for municipal utilities:

- → Public Power Energy Transition Roadmap
- → Electric Municipal Utilities and the Transition to a Clean Energy Future: A Guide for Municipal Utility Leaders
- → The Municipal Utility Community Solar Workbook
- → Introduction to Inclusive Utility Investment

Other resources on municipal utility operation:

- → Public Power Governance Survey
- → Protecting Public Power from Buyout Threats