



# Bringing the Benefits of Energy Efficiency and Renewable Energy to Low-Income Communities

EPA's State and Local Climate and Energy Program is developing a series of case studies and program profiles to help officials in state and local energy, environmental, housing, and social services agencies understand promising practices and successful models that they can use to bring energy efficiency and renewable energy (EE/RE) to low-income communities and reduce greenhouse gas (GHGs) emissions.

## Learning from Effective Programs

The profiles and case studies in this ongoing series highlight effective programs at the state and local levels that have led to the successful adoption of EE/RE in low-income communities. EPA has selected programs for inclusion based on their demonstrated ability to achieve results through on-the-ground implementation and their potential to be scalable, replicable, and sustainable, and to highlight a diverse range of communities (geography, size) and types of EE/RE programs.

The profiles and case studies focus on how these programs have addressed, in a practical manner, the challenges to ensuring low-income households share in the multiple benefits of EE/RE. The practices and approaches described in this growing series highlight only some of potential strategies for bringing EE/RE to low-income communities, and are not meant to be comprehensive.

The series includes two types of publications:

- **Profiles** describe successful programs, their key features and approaches, partners, funding sources, and achievements.
- **Case studies** dig deeper to focus on information that can help other organizations replicate successful programs. Case studies provide more detail and include additional sections covering keys to success and tips for replication and sustainability.

Readers of these documents should come away with ideas for programs that might address challenges faced by their communities; a sense of what it takes to effectively implement these programs, including partners and funding sources; and insights from the featured communities about what made their programs successful.

## The Role for State and Local Governments

EE/RE programs create benefits no matter where they are implemented, but low-income communities offer some of the greatest opportunities for positive impact. By investing in EE/RE programs in low-income communities, state and local governments can:

- reduce emissions of GHGs and conventional air pollutants,
- reduce the disproportionate energy burden faced by many low-income households,
- free up household funds to meet basic needs and improve quality of life,
- improve comfort and indoor air quality,
- improve home health and safety,
- reduce the burden on utilities of unpaid or overdue bills,
- create jobs, and
- provide a range of other economic and social benefits for individual households and the communities around them.

EPA is developing this collection of case studies, program profiles, and other resources to help state and local governments bring GHG and other benefits to communities that need them most.

These resources are available at <https://www.epa.gov/statelocalclimate/bringing-benefits-energy-efficiency-and-renewable-energy-low-income-communities>



## Program Finder

|  | Promising Practices                |   |                                  |                          |                          |                                 |                          |
|--|------------------------------------|---|----------------------------------|--------------------------|--------------------------|---------------------------------|--------------------------|
|  | Eliminate or reduce up-front costs | Partner with trusted organizations that | Create a one-stop hub for energy | Address eligibility gaps | Address split incentives | Adopt a whole-building approach | Consider community solar |
| <b>Case Studies</b>  |                                    |   |                                  |                          |                          |                                 |                          |
| California Multifamily Affordable Solar Housing Program (RE) | ✓                                  |   |                                  |                          | ✓                        |                                 | ✓                        |
| Duluth Energy Efficiency Program (EE)                        | ✓                                  | ✓                                       |                                  |                          |                          | ✓                               |                          |
| EmPOWER Maryland (EE)  | ✓                                  | ✓                                       |                                  |                          |                          | ✓                               |                          |
| Energy Outreach Colorado (EE)                                | ✓                                  | ✓                                       | ✓                                | ✓                        |                          | ✓                               |                          |
| <b>Profiles</b>  |                                    |   |                                  |                          |                          |                                 |                          |
| DTE Energy's Energy Efficiency Programs (EE)                 | ✓                                  | ✓                                       |                                  |                          |                          |                                 |                          |
| Duke Energy Neighborhood Energy Saver (EE)                   | ✓                                  |   |                                  |                          |                          | ✓                               |                          |
| Elevate Energy (EE)  | ✓                                  | ✓                                       | ✓                                |                          | ✓                        |                                 |                          |
| GRID Alternatives (RE)                                       | ✓                                  | ✓                                       |                                  |                          |                          |                                 | ✓                        |
| Help My House (EE)   | ✓                                  | ✓                                       |                                  |                          |                          | ✓                               |                          |
| Santa Ynez Tribal Community (EE)                             | ✓                                  | ✓                                       |                                  |                          |                          |                                 |                          |

## Additional Resources

These documents provide an introduction to some of the special considerations involved in bringing EE/RE in low-income communities, strategies for successful implementation, and key resources for state and local governments.

**Energy Efficiency and Renewable Energy in Low-Income Communities: A Guide to EPA Programs** (U.S. EPA, 2016). This guide helps state and local staff connect with EPA initiatives that can assist them in expanding or developing their own EE/RE and climate initiatives in ways that benefit low-income communities. <https://www.epa.gov/statelocalclimate/energy-efficiency-and-renewable-energy-low-income-communities>

**Lifting the High Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low-Income and Underserved Communities** (American Council for an Energy-Efficient Economy and Energy Efficiency for All, 2016). This report provides energy burden values for 48 of the largest U.S. cities, and includes strategies for alleviating them. <http://energyefficiencyforall.org/resources/lifting-high-energy-burden-americas-largest-cities>

**Low-Income Solar Policy Guide** (Grid Alternatives, Vote Solar, and Center for Social Inclusion, 2016). This online resource provides guiding principles, policy tools, and successful models for expanding access to solar power and solar jobs in low-income communities. <http://www.lowincomesolar.org/>

**Program Design Guide: Energy Efficiency Programs in Multifamily Affordable Housing** (Energy Efficiency for All, 2015). This guide for policymakers and program administrators provides an overview of the energy characteristics and EE potential of multifamily affordable housing, as well as best practices for planning, designing, and implementing successful EE programs in this type of housing stock. <http://energyefficiencyforall.org/resources/program-design-guide-energy-efficiency-programs-multifamily-affordable-housing>

## Promising Practices

The approaches below represent some of the most promising current practices for bringing the benefits of EE/RE to low-income communities. The **Program Finder** on the left shows that some of these practices are widely used, while others are innovative approaches to addressing key barriers.

**[icon] Eliminate or reduce up-front costs**  
Reducing installation and equipment costs can make EE/RE more attractive to low-income communities. Costs can be covered outright (e.g., by grants) or through loans such as on-bill financing, in which households see immediate bill reductions while repaying the loan.

**[icon] Partner with trusted organizations**  
Organizations and agencies that already provide services to low-income communities offer a familiar, trusted conduit for support, information, and education. This facilitates the process of assessing needs and delivering EE/RE services.

**[icon] Create a one-stop hub for energy assistance**  
A hub improves coordination across programs that provide energy services to low-income communities, allowing them to work together to serve multiple needs and reach more households. A hub also makes it easier for households to navigate the application processes for various energy assistance programs.

**[icon] Address eligibility gaps**  
By providing funding and technical assistance to low-income households that do not qualify for federal energy assistance but still struggle to pay energy bills, programs can reach a wider range of households.

**[icon] Address split incentives**  
Using green leases, virtual net metering, and other strategies to address split incentives (in which landlords and tenants have conflicting incentives for EE/RE), programs can ensure that everyone benefits from EE/RE, regardless of who pays the energy bills or the costs of upgrades.

**[icon] Adopt a whole-building approach**  
An integrated approach that treats the building as a system can achieve larger improvements in efficiency and comfort than one in which components (appliances, lighting, heating, insulation, etc.) are addressed in a piecemeal fashion.

**[icon] Consider community solar**  
Community-shared solar energy systems, in which electricity is generated off-site and distributed to households, can be used to expand the benefits of carbon-free solar power (such as lower energy bills) to low-income renters and for building owners for whom rooftop solar is not feasible.

