



## Ozone Advance Program Resources

### *Energy Efficiency, Renewable Energy and Combined Heat and Power Policies and Programs*

Energy efficiency (EE), renewable energy (RE), and combined heat and power (CHP) are proven and cost-effective strategies that can reduce air pollution associated with the production of electricity from fossil-fuel power plants. These policies and programs can be a key part of a larger strategy to reduce ozone precursor emissions (e.g., NO<sub>x</sub>) in Ozone Advance areas.

This document discusses resources and common EE, RE and CHP policies and programs that state and local air agencies can consult as they develop Ozone Advance Plans. This list is not intended to be exhaustive – EE, RE, and CHP initiatives not mentioned here may likewise be effective options for lowering ozone precursor emissions.

### *Background and Opportunity*

State Energy Offices (SEO), Public Utility Commissions (PUC), and local governments adopt, design, and implement EE, RE, and CHP policies and programs. To account for the emissions impacts of these initiatives, air agencies can work with their state and local energy counterparts to identify the EE, RE and CHP policies and programs currently in place or being considered within their jurisdiction. SEOs, PUCs and local governments can also provide information about the energy impacts of EE, RE and CHP policies or programs compared to baseline assumptions, and the procedures for verifying implementation.

Existing EE, RE and CHP initiatives with high rates of participation, consistent funding, and expectations of ongoing success – consistent with the Ozone Advance commitment period – are good candidates for the Ozone Advance Program. In addition to “on-the-books” policies and programs, air agencies can consider the longer-term impacts of plans to expand current efforts, or to adopt and implement new policies and programs.

To get started, state and local air agency staff may want to familiarize themselves with key elements of EE, RE and CHP initiatives, such as:

- Program or policy design, and related energy impacts
- Measuring and verifying the impacts of EE, RE, and CHP initiatives
- Methods for quantifying their emission impacts

An important source of basic information is U.S. EPA’s new resource, [“The Roadmap for Incorporating EE/RE Policies and Programs in State and Tribal Implementation Plans \(SIPs\) and \(TIPs\).”](http://www.epa.gov/airquality/advance/resources.html) Select resources for getting started are available at: <http://www.epa.gov/airquality/advance/resources.html>



## *Steps for Getting Started*

State and local air agencies interested using EE, RE or CHP as part of a larger strategy to reduce ozone precursor emissions (e.g., NO<sub>x</sub>) in Ozone Advance areas can take the following steps to get started:

**Step 1.** Find the appropriate contact in your State Energy Office, Public Utility Commission, Council of Governments or Metropolitan Planning Organizations who can describe the state and local EE, RE and CHP policies and programs that are currently on-the-books in your jurisdiction.

**Step 2.** Work with your energy counterparts to gather energy-impact data for the EE, RE and CHP policies and programs over the time period of interest. This period may coincide with your jurisdiction's Ozone Advance commitments or some other air-quality planning horizon.

**Step 3.** Account for the emissions impacts associated with the jurisdiction's current level of participation in these EE, RE and CHP policies and programs. State and local air agencies can estimate emission reductions using [EPA's eGRID](#) or the [EPA's Draft Power Plant Emissions Calculator](#).

**Step 4.** Work with your energy counterparts in your jurisdiction to discuss the potential for expanding or encouraging greater participation for these existing EE, RE and CHP policies and programs.

**Step 5.** Ask if your energy counterparts have plans to adopt new EE, RE and CHP policies and programs in the near future. For new EE, RE and CHP policies and programs; estimate the timeframe and magnitude of expected emissions impacts, and/or funding sources. Then account for potential emissions reductions associated with these new efforts.



## State and Local EE, RE and CHP Policies

EE/RE policies are regulations, statutes, or state Public Utility Commission orders that require regulated parties to acquire or fund efficiency and renewable energy resources. CHP policies can support the increased use of clean distributed generation (DG), such as CHP. Air agencies can work with their energy counterparts to document the effectiveness of these policies, and to verify that robust provisions for measurement and verification are in place.

### Common Examples of State and Local EE, RE and CHP Policies

State Policies	Local Policies
Renewable portfolio standards (RPS)	Energy-efficient product procurement requirements for municipal buildings
Energy efficiency resource standards (EERS)	On-site renewable energy generation requirements for municipal buildings
Public benefit funds (PBF) for EE/RE	Building energy codes that exceed state requirements
Mandatory commercial whole-building energy use disclosure at time of sale or lease	Mandatory commercial whole-building energy use disclosure at time of sale or lease
Mandatory state public buildings energy conservation targets	Municipal electric utilities' adoption and implementation of net metering or renewable portfolio standards
Output Based Emissions Regulations as an incentive for CHP	Commercial Property Assessed Clean Energy (PACE)
Standard interconnection Rules for CHP	

**EE, RE and CHP Policy Resources** Air officials interested in learning more about the adoption, implementation, and evaluation of EE, RE and CHP policies have numerous resources at their disposal. Examples include:

- [Clean Energy-Environment Guide to Action](#)
- [Local Climate and Energy Strategy Series](#)
- [Combined Heat and Power Partnership](#)
- [American Council for an Energy Efficient Economy \(ACEEE\)](#)
- [Database of State Incentives for Renewable and Efficiency \(DSIRE\)](#)
- [Commercial PACE Primer](#)



## State and Local EE/RE Programs

EE/RE programs are designed to increase adoption of specific energy-efficient technologies and practices in targeted end-use sectors through education and outreach, financial incentives, financing mechanisms, and/or technical or deployment assistance. EE/RE programs may be implemented in support of mandatory state-level policy goals (e.g., an EERS or RPS), or may be for other purposes (e.g., voluntary purchases of RE).

### Common Examples of EE/RE State and Local Programs

State Programs	Local Programs
Statewide EE education, awareness, and behavior programs for commercial and residential sectors	Locally-initiated EE awareness for commercial and residential sectors
Voluntary Renewable Portfolio Goals	Voluntary green power programs (E.g., EPA green power partnership program)
Technical assistance programs, i.e., energy audits and other EE/RE project-design types of services	Implementation of municipal energy conservation plan
Financial incentives and rebates for equipment that meets prescribed EE/RE specifications	Municipal building retrofit program
	Update local zoning and building codes to accommodate combined heat and power (CHP)
	Renewable energy zoning ordinances (modify local ordinances to facilitate on-site renewable energy generation installation)

**EPA’s EE/RE Program Resources** Air officials interested in learning more about the adoption, implementation, and evaluation of EE/RE programs have numerous resources at their disposal. Examples include:

- [Local Climate and Energy Strategy Series](#)
- [Green Power Partnership](#)
- [Combined Heat and Power Partnership](#)
- [Energy Star Programs](#)

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