Clean Energy Resources Compendium

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Introduction

EPA's Clean Energy Programs are working with state policy makers, electric and gas utilities, energy customers, and other key stakeholders to encourage the use of clean energy throughout the country. By identifying, designing and implementing clean energy policy and technology solutions, EPA's Clean Energy Programs are delivering important environmental and economic benefits. Clean energy includes demand- and supply-side resources that deliver clean, reliable, and low-cost ways to meet energy demand and reduce peak electricity system loads. Clean energy resources include energy efficiency and clean energy supply, which includes renewable energy and combined heat and power (CHP) in distributed and centralized applications.

The EPA's Climate Protection Partnerships Division (CPPD) is responsible for both an array of innovative, voluntary pollution prevention partnership programs, as well as work to remove barriers to clean energy. A number of barriers exist across policy and program implementation that prevent cost-effective clean energy options from reaching their full potential. The Division's goal is to prevent the emission of greenhouse gases, measured specifically in terms of the carbon equivalent of avoided emissions.

End-use energy efficiency provides significant opportunities to reduce substantial carbon emissions from the electricity and natural gas sectors and provide economic benefits. Through its work to promote these opportunities, CPPD continues to experience disincentives and other barriers in the electricity policy arena. In order to remove these barriers and achieve the environmental and economic benefits of energy efficiency, CPPD works with state regulators, energy officials and utilities to share information on best practices and innovative approaches to policies that advance clean energy options, including energy efficiency.

States have a number of innovative cost effective clean energy programs and policies in place. Yet, they can still take advantage of untapped best practices from other states and put in place the "next generation" of cost-effective measures that can help reduce energy demand and address multiple environmental, public health and economic goals. State Energy Offices (SEOs) are well-positioned, based on existing expertise and infrastructure, to play a more significant role in advancing clean energy initiatives: they are often involved in identifying, designing and administering and/or overseeing clean energy programs; they play a significant outreach and education function and often have established networks within the end-user community (e.g., industry, commerce, public schools, high education, etc.) and the general public; and they are also often at the core of any government-driven lead-by-example efforts and have an important measurement and evaluation role. The purpose of this compendium is to provide SEOs with information about best practices and guidance on how to adapt these practices to their own contexts.

Compendium Format

The Clean Energy Resources Compendium is organized into three main levels: national information, clean energy topic areas, and regional details. Many resources may fit under multiple levels and will therefore be linked to multiple times.

- **National Information**– Resources that are more general in nature and do not fit in one topic or region, including documents that cover many topic areas as well as incorporating information from throughout the country.
- **Clean Energy Topic Areas –** Resources that are specific to individual topics like energy efficiency, renewable energy technologies, utility incentives, public benefits funds, efficiency standards, etc.
- **Regional Resources –** Information that is specifically targeted toward individual regions. This includes region specific clean energy initiatives and state-level energy plans as well as resources from the topic section that are tailored to a specific region.

The compendium starts with national information since it applies to every state and lays the framework for the rest of the resources. The topic areas are anticipated to be the most heavily used section of the compendium because they provide State Energy Offices with targeted resources in each clean energy area that can be mixed and matched to meet a state's needs. This is also where states find the best practices in each Clean Energy topic area that are in practice throughout the country. The regional section is designed to give states a sense of where their neighbors and peers are in the process of developing Clean Energy plans and programs, and contains more comprehensive information on energy issues in the regions rather than best practice information.

National Information:

- **EPA Clean Energy website** (EPA) http://epa.gov/cleanenergy/ : provides basic information on clean energy as well as links to a variety of resources concerning clean energy
- **EPA Combined Heat and Power Partnership** http://www.epa.gov/chp/state-policy/index.html: provides basic information on state policies that affect the deployment of combined heat and power (CHP).
- **EPA Green Power Partnership** http://www.epa.gov/greenpower: provides basic information for organizations interested in buying green power.
- **Clean Energy-Environment Guide to Action** (EPA) http://epa.gov/cleanenergy/energy-programs/state-and-local/state-best-practices.html: this report is designed to share the experiences and lessons learned from successful state clean energy policies and help states evaluate these options, programs, and policies to determine what is most appropriate for them. The *Guide to Action* describes 16 clean energy policies, details the best practices and attributes of effective state programs, and provides resources for more information.
- **Summary of State Clean Energy – Environment Actions** (EPA) http://epa.gov/cleanenergy/documents/summary-matrix.pdf: matrix containing information on which states have implemented clean energy policies.
- **National Action Plan on Energy Efficiency Report** (EPA, 2006) http://epa.gov/cleanenergy/energy-programs/napee/resources/action-plan.html: identifies key barriers limiting greater investment in energy efficiency and reviews sound business practices for removing these barriers.
- **Energy Efficiency and Renewable Energy (EERE) State Energy Plan website -** http://www.eere.energy.gov/state_energy_program/publications_by_topic.cfm/topic=509: This website provides a list of states that have produced energy plans along with links to each plan. There are 28 states represented on the list with energy roadmaps, energy efficiency initiatives, energy action plans, or strategic reports.
- **EPA State Climate Change Action Plan website -** http://www.epa.gov/climatechange/wycd/stateandlocalgov/state_action.html: This website provides information on how states can begin developing a climate change action plan. There is a list of the 29 states and Puerto Rico that have already developed action plans as of July 2006. Links are provided to each of these action plans so that states can see what kinds of programs their neighbors are putting in place to combat climate change.
- **PEW Climate Change State Actions website -** http://www.pewclimate.org/what_s_being_done/in_the_states/: contains information on state actions concerning climate change, including legislation examples, case studies, and regional initiatives.
- **State Energy Program and Activity Update Winter 2007** (NASEO) http://www.naseo.org/sep/updates/2007_SEP_Updates.pdf: State by state summaries of activities partially funded with federal SEP dollars.
- **EERE State Activities and Partnerships website** (EERE) http://www.eere.energy.gov/states/: information on state involvement in energy projects as well as state energy publications.
- **State Clean Energy-Environment Technical Forum,** (EPA) http://epa.gov/cleanenergy/energy-programs/state-and-local/state-forum.html: EPA began the State Clean Energy-Environment Technical Forum to create a venue for exploring analytical questions and resolving key issues surrounding state clean energy efforts. Organized as a monthly discussion among state energy, environmental, and public utility commission officials, the Technical Forum features peer exchanges, expert presentations, and targeted technical assistance.

Clean Energy Topic Areas:

Energy Efficiency Portfolio Standards

- **EPA Clean Energy-Environment Guide to Action section on Energy Efficiency Portfolio Standards** - http://epa.gov/cleanenergy/documents/gta/guide_action_chap4_s1.pdf: discusses the objective of an EEPS and provides information on how to design an effective EEPS.
- **Energy Efficiency Resource Standards: Experience and Recommendations** (ACEEE, 2006) http://aceee.org/pubs/e063.pdf?CFID=2342054&CFTOKEN=54522154: Summary of state experiences with enacting EERS's and recommendations about how to design successful policies.

Appliance Standards and Building Codes

- **EPA Clean Energy-Environment Guide to Action section on Building Codes for Energy Efficiency** - http://epa.gov/cleanenergy/documents/gta/guide_action_chap4_s3.pdf discusses how to effectively design, implement, and enforce building codes for energy efficiency.
- **EPA Clean Energy-Environment Guide to Action section on State Appliance Efficiency Standards** - http://epa.gov/cleanenergy/documents/gta/guide_action_chap4_s4.pdf: reviews the objective, benefits, and effective design principles of state appliance efficiency standards.
- **Building Codes and Energy Efficiency Fact Sheet -** http://epa.gov/cleanenergy/documents/buildingcodesfactsheet.pdf: provides basic information on the importance of strong, enforced building codes to energy efficiency.
- **Leading the Way: Continued Opportunities for New State Appliance and Equipment Efficiency Standards** (ACEEE, 2006) http://aceee.org/pubs/a062.pdf?CFID=2342054&CFTOKEN=54522154: describes sensible and up-to-date opportunities to advance appliance and equipment efficiency standards.

Energy Efficiency

- **The Business Case for Energy Efficiency** (EPA – NAPEE Chp. 4) http://epa.gov/cleanenergy/documents/napee/napee_chap4.pdf: Outlines the business case approach used to examine the financial implications of enhanced energy efficiency investment on utilities, consumers, and society.
- **Energy Efficiency Program Best Practices** (EPA – NAPEE Chp. 6) http://epa.gov/cleanenergy/documents/napee/napee_chap6.pdf: Reviews and presents best practices for operating successful energy efficiency programs at a portfolio level — addressing issues such as assessing energy efficiency potential, screening energy efficiency programs for cost-effectiveness, and developing a portfolio of approaches.
- **Energy Efficiency Policy Toolkit** (Regulatory Assistance Project, 2007) http://www.raponline.org/Pubs/Efficiency_Policy_Toolkit_1_04_07.pdf: a compendium of successful regulatory policies that have advanced the development of cost-effective clean energy within both the electric and gas systems in several states.
- **Guide for Conducting Energy Efficiency Potential Studies** (NAPEE resource November 2007) http://epa.gov/cleanenergy/documents/potential_guide.pdf: identifies three main applications for energy efficiency potential studies and provides examples of each, along with a description of how key decisions regarding scope and methodology were made to best achieve the studies' objectives. It also provides an overview of the main analytical steps in conducting a potential study and introduces several related concepts.
- **Energy Efficiency Benefits Calculator** (NAPEE resource) – available at http://epa.gov/cleanenergy/energy-programs/napee/resources/calculator.html: can be used to help educate stakeholders on the broad benefits of energy efficiency. It provides a simplified tool to demonstrate the business case for energy efficiency from the perspective of the consumer, the

utility, and society. It can be adapted to apply to various utility structures, policy mechanisms, and energy growth scenarios.

- **Energy Efficiency's Next Generation: Innovation at the State Level** (ACEEE, 2003) http://aceee.org/pubs/e031full.pdf?CFID=2342054&CFTOKEN=54522154: describes the major categories of energy efficiency initiatives, summarizes the actions taken in leading states, and provides guidance for further action.
- **Energy Efficiency and Renewable Sources: A Primer** (National Association of State Energy Officials) http://www.naseo.org/energy_sectors/stateenergy/eere_primer.pdf: provides information on successful clean energy programs and best practices throughout the country.
- **Energy Efficiency Program Planning Workbook** (National Association of State Energy Officials) http://www.naseo.org/about/Energy_Efficiency.pdf: This workbook is designed to assist state policy makers and regulators who are considering or designing ratepayer-funded energy efficiency programs.
- **Best Practices Benchmarking for Energy Efficiency Programs,** (CPUC) http://www.eebestpractices.com/index.asp: This webpage provides a search function to look for best practice studies on energy efficiency.
- **A Toolkit for States: Using Supplemental Environmental Projects (SEPs) to Promote Energy Efficiency (EE) and Renewable Energy (RE)** (EPA, 2005) - http://www.epa.gov/cleanenergy/documents/sep_toolkit.pdf
- **EERE State Energy Alternatives: Low Income Programs** - http://www.eere.energy.gov/states/alternatives/low_income_prog.cfm: information on federal funding that is given to states to assist low-income households with energy issues. Includes weatherization and energy assistance programs.
- **Meeting Essential Needs**: **The Results of a National Search for Exemplary Utility-Funded Low-Income Energy Efficiency Programs** (ACEEE) - http://aceee.org/pubs/u053.pdf?CFID=2342054&CFTOKEN=54522154: identifies and profiles programs that provide models of "best practices" for addressing the energy needs of low-income households.

ENERGY STAR

- **State Building Program Partnerships Facts About the Federal Energy Star Program** (National Association of State Energy Officials) http://www.naseo.org/tforces/energystar/resources/Energy_Star_Overview.pdf: Energy Star overview for state and territory energy officials. Information on how State Energy Offices can partner with ENERGY STAR and gain access to market tools, marketing and communications materials, and ENERGY STAR's strategic approach.
- **Energy Star – A Powerful Resource for Saving Energy** (EPA) http://www.epa.gov/solar/pdf/napee_energystar-factsheet.pdf: presents Energy Star tools and strategies that help utilities, state agencies, and other organizations deliver energy savings programs to their communities with lower program costs, quicker implementation and increased overall program effectiveness.
- **Energy Star – National Campaigns (EPA)** http://www.energystar.gov/index.cfm?c=promotions.pt_national_promotions: presents information on seven national campaigns to promote Energy Star products and energy efficiency.
- **Energy Star – Purchasing and Procurement Guidelines** (EPA) http://www.energystar.gov/purchasing: contains EPA resources designed to assist procurement officials in smart purchase decisions.
- **Energy Star – Power Management** (EPA) http://www.energystar.gov/powermanagement: encourages the use of power management programs on computers to save money and energy.

Public Benefits Funds

- **A Federal System Benefits Fund: Assisting States to Establish Energy Efficiency and Other System Benefit Programs** (ACEEE) http://www.aceee.org/energy/pbf.pdf: fact sheet on public benefits funds detailing benefits of PBFs.
- **Clean Energy Funds Fact Sheet** (EPA) http://www.epa.gov/chp/state-policy/funds_fs.html: describes why states would implement PBFs, what different fund options exist, and which states currently have clean energy funds.
- **EPA Clean Energy-Environment Guide to Action section on Public Benefits Funds for Energy Efficiency** http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap4_s2.pdf: provides information on the objective and benefits of PBFs as well as a list of states that currently have PBF programs in place. Information is provided on different policy options that various states have used as well as guidelines for how to design an effective PBF program.
- **EPA Clean Energy-Environment Guide to Action section on Public Benefits Funds for State Clean Energy Supply Programs -** http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap5_s2.pdf: provides information of how to design PBFs to address key market barriers to clean energy supply including the upfront cost of equipment and to provide consumer and education outreach.
- **ACEEE's 3rd National Scorecard on Utility and Public Benefits Energy Efficiency Programs: A National Review and Update of State-Level Activity** (ACEEE, 2005) http://aceee.org/pubs/U054.pdf?CFID=2342054&CFTOKEN=54522154
- **The Impact of State Clean Energy Fund Support for Utility Scale Renewable Energy Projects** (Clean Energy States Alliance) http://www.cleanenergystates.org/CaseStudies/lbnl-56422_Impact_RE_UtilityScale_ april2006.pdf: summarizes the support that state clean energy funds have provided to utility scale energy projects, detailing the amount of funds obligated and the number, capacity, and resource type of projects supported.

Renewable Energy

- **A Toolkit for States: Using Supplemental Environmental Projects (SEPs) to Promote Energy Efficiency (EE) and Renewable Energy (RE)** (EPA, 2005) - http://www.epa.gov/cleanenergy/documents/sep_toolkit.pdf
- **State Energy Alternatives Website** (EERE) http://www.eere.energy.gov/states/alternatives/: contains information about renewable technologies, cost information, examples of existing applications, and policy options that lawmakers around the country are using to bring renewable energy into their state energy portfolios.
- **EERE State Energy Program website -** http://www.eere.energy.gov/state_energy_program/: provides information on state clean energy projects and information resources on a variety of topics in each state.
- **WGA Task Force Reports** (WGA Clean and Diversified Energy Initiative) http://www.westgov.org/wga/initiatives/cdeac/cdeac-reports.htm#TaskForceReports: reports on biomass, geothermal, solar, and wind resources, and how they can be utilized in the West.
- **EPA Clean Energy-Environment Guide to Action section on Interconnection Standards -** http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap5_s4.pdf: reviews the benefits of interconnection standards, which states currently have standards, and how to design effective interconnection policies.
- **EPA Green Power Partnership** http://www.epa.gov/greenpower: provides basic information for organizations interested in buying green power.
- **EPA Clean Energy-Environment Guide to Action section on Renewable Portfolio Standards** http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap5_s1.pdf: describes effective RPS initiatives as well as implementation strategies.

Energy Resource Planning

- **Guide to Resource Planning with Energy Efficiency** (November 2007) http://www.epa.gov/cleanenergy/documents/resource_planning.pdf: describes the key issues, best practices, and main process steps for integrating energy efficiency into resource planning. The Guide details how to use a variety of methods to help ensure that energy efficiency programs provide a resource as dependable and valuable to utilities and their customers as any supply-side resource.
- **Energy Resource Planning Processes** (EPA – NAPEE Chp. 3) http://www.epa.gov/cleanenergy/documents/napee/napee_chap3.pdf: Reviews state and regional planning approaches, including Portfolio Management and Integrated Resource Planning, which are being used to evaluate a broad array of supply and demand options on a level playing field in terms of their ability to meet projected energy demand.
- **EPA Clean Energy-Environment Guide to Action section on State and Regional Energy Planning** - http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap3_s2.pdf: describes how states and regions have included clean energy in their energy planning efforts, discusses the role of various participants in the process, describes the interaction with federal and state policies or programs, and lays out several sets of best practice measures with respect to plan development, implementation, and evaluation.
- **Guidance on State Implementation Plan (SIP) Credits for Emission Reductions From Electric-Sector Energy Efficiency and Renewable Energy Measures** (EPA, 2004) http://www.epa.gov/ttn/oarpg/t1/memoranda/ereseerem_gd.pdf: describes how states can improve their air quality through the development of clean energy measures in SIPs.
- **Energy Efficiency in Western Utility Resource Plans: Impacts on Regional Resource Assessment and Support for WGA Policies** the spreadsheet tool can be downloaded at http://eetd.lbl.gov/ea/EMS/rplan-pubs.html.
- **Balancing Cost and Risk: The Treatment of Renewable Energy in Western Utility Resource Plans** (Lawrence Berkeley National Laboratory) http://eetd.lbl.gov/ea/ems/reports/58450.pdf: examines how twelve western utilities treat renewable energy in their recent resource plans.

Utility Rate Design

- **Utility Ratemaking & Revenue Requirements** (EPA - NAPEE Chp. 2) http://www.epa.gov/cleanenergy/documents/napee/napee_chap2.pdf: Reviews mechanisms for removing disincentives for utilities to consider energy efficiency.
- **Rate Design** (EPA – NAPEE Chp. 5) http://www.epa.gov/cleanenergy/documents/napee/napee_chap5.pdf: Reviews a variety of rate design structures and their effect in promoting greater investment in energy efficiency by the end-user.
- **EPA Clean Energy-Environment Guide to Action section on Utility Planning and Incentive Structures** - http://www.epa.gov/cleanenergy/energy-programs/state-and-local/state-best-practices.html: provides information on portfolio management strategies, utility incentives for demand-side resources, and approaches to removing rate barriers to distributed generation.
- **Utility Rates Fact Sheet** (EPA) http://www.epa.gov/chp/state-policy/utility_fs.html: outlines appropriate rate design to allow both utility cost recovery and the expansion of clean-energy DG.

Renewable Portfolio Standards

- **EPA Clean Energy-Environment Guide to Action section on Renewable Portfolio Standards** http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap5_s1.pdf: describes effective RPS initiatives as well as implementation strategies.

- **Renewable Portfolio Standards Fact Sheet** (EPA) http://www.epa.gov/chp/state-policy/renewable_fs.html: describes the benefits of RPS for states, how RPS encourage CHP projects, and some of the different state requirements for those that have implemented them.
- **Energy Portfolio Standards and the Promotion of Combined Heat and Power** (EPA) http://www.epa.gov/chp/documents/eps_and_promotion.pdf: provides examples of state EPS programs that include CHP and offers an overview of the benefits and characteristics of CHP.
- **The Renewables Portfolio Standard, A Practical Guide** (NARUC) http://www.oe.energy.gov/DocumentsandMedia/narucrps.pdf: provides background information on renewable portfolio standards, with information on how to implement the policy to meet specific goals.

Clean Distributed Generation / Combined Heat and Power

- **EPA CHP Partnership** - http://www.epa.gov/chp/: website provides links to information on CHP technologies, emissions benefits, funding opportunities, and state policy resources.
- **Energy Portfolio Standards and the Promotion of Combined Heat and Power** (EPA) http://www.epa.gov/chp/documents/eps_and_promotion.pdf: provides examples of state EPS programs that include CHP and offers an overview of the benefits and characteristics of CHP.
- **U.S. Combined Heat and Power Association: CHP Policy at the State Level website** - http://uschpa.admgt.com/statechp.html: contains information on regional CHP initiatives, efficiency recommendations for CHP policies, and summary information on RPS's, standby rates, interconnection standards, and emissions as they relate to CHP.
- **Combined Heat and Power White Paper** (WGA Clean and Diversified Energy Initiative) http://www.westgov.org/wga/initiatives/cdeac/CHP-full.pdf: provides information on the benefits of CHP, barriers to its use in the West, and policy recommendations for Western Governors.
- **Distributed Generation Policy Scoring Tool** (NASEO, RAP, 2005) http://www.raponline.org/Feature.asp?select=83: this program is targeted toward state regulators and policy makers to assist in assessing the strengths and weaknesses of their existing Distributed Generation and related policies.
- **Mid-Atlantic Distributed Resources Initiative (MADRI)** - http://www.energetics.com/madri/: information pursuant to the goal of identifying and removing retail barriers to the deployment of distributed generation, demand response and energy efficiency in the Mid-Atlantic region.
- **CHP Regional Applications Centers (RAC) website** (DOE) - http://www.eere.energy.gov/de/chp/chp_applications/chp_application_centers.html: provides information on application centers throughout the country that provide region specific information on CHP issues.

Incentive and Funding Programs

- **Clean Distributed Generation Funding Opportunities Database** - http://www.epa.gov/chp/funding_opps.htm: Database of financial incentives that deal with CHP and biomass distributed installations.
- **EPA Clean Energy-Environment Guide to Action section on Funding and Incentives** - http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap3_s4.pdf: reviews targeted funding and incentive strategies that are bringing clean energy to the marketplace, including loans, tax incentives, grants, buy-downs, performance contracting, set-asides for energy efficiency/renewable energy (EE/RE), and supplemental environmental projects (SEPs).
- **Aligning Utility Incentives with Energy Efficiency Investment** (NAPEE tool November 2007) - http://www.epa.gov/cleanenergy/documents/incentives.pdf: describes the financial effects on a utility of its spending on energy efficiency programs, how those effects could constitute barriers to more aggressive and sustained utility investment in energy efficiency, and how adoption of various policy mechanisms can reduce or eliminate these barriers.

- **Database of State Incentives for Renewables and Efficiency (DSIRE) -** http://www.dsireusa.org/: information on state, local, utility, and federal incentives that promote renewable energy and energy efficiency.

Interconnection

- **Interconnection Fact Sheet** (EPA) http://www.epa.gov/chp/state-policy/interconnection_fs.html: outlines how and why states could implement standard interconnection rules to encourage DG technologies.
- **EPA Clean Energy-Environment Guide to Action section on Interconnection Standards -** http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap5_s4.pdf: reviews the benefits of interconnection standards, which states currently have standards, and how to design effective interconnection policies.
- **Survey of Interconnection Rules** (Regulatory Assistance Project) **-** http://www.epa.gov/chp/documents/survey_interconnection_rules121806.pdf: addresses the regulatory context for interconnection of smaller scale distributed generation, highlighting the critical issues in interconnection and how they are incorporated into model rules.
- **Model Interconnection Procedures and Agreement for Small Distributed Generation Resources** (National Association of Regulatory Utility Commissioners) http://www.naruc.org/associations/1773/files/dgiaip_oct03.pdf

Air Quality

- **Output-Based Environmental Regulations Fact Sheet** (EPA) http://www.epa.gov/chp/state-policy/obr_factsheet.html: describes how these regulations encourage CHP projects and which states have already implemented them.
- **EPA Clean Energy-Environment Guide to Action section on Output-Based Environmental Regulations to Support Clean Energy Supply -** http://www.epa.gov/cleanenergy/documents/gta/guide_action_chap5_s3.pdf: reviews the benefits of output-based emissions regulations, which states currently have such regulations, and how to design effective policies.
- **Integrating Energy Efficiency and Renewable Energy Measures in the Air Quality Planning Process: A Guidance for State and Local Officials** (EPA) **-** http://www.epa.gov/cleanenergy/documents/SIPS-factsht-final_nodraftmark.pdf: fact sheet on integrating energy and air quality goals.
- **Output Based Regulations: A Handbook for Air Regulators** (EPA) http://www.epa.gov/chp/documents/obr_final_9105.pdf: outlines what the regulations are, why states should adopt them, and offers suggestions on how to adopt output-based emission standards.
- **Ozone Transport Commission High Electric Demand Day (HEDD) Activity** http://www.otcair.org/document.asp?fview=meeting: These activities looked at emission reduction strategies on HEDD.

Clean Energy – Environment Tools

- **Rocky Mountain Institute's Community Energy Opportunity Finder 2.0 -** http://www.energyfinder.org/: helps municipalities collect energy use data and then calculate potential energy savings, dollar savings, emission reductions of nitrogen oxides, sulfur dioxide, and carbon dioxide, and job creation that could be achieved through energy efficiency programs.
- **GHG Equivalencies Calculator**, http://www.epa.gov/cleanenergy/energy-resources/calculator.html - The Greenhouse Gas Equivalencies Calculator is designed to enable public and private sector organizations and individuals to quickly and easily translate greenhouse gas (GHG) reductions from units that are typically used to report reductions (e.g., metric tons of

carbon dioxide equivalent) into terms that are easier to conceptualize (e.g., equivalent number of cars not driven for one year).

- **HOMER**, run by NREL (http://www.nrel.gov/homer/) - HOMER is a computer model that simplifies the task of evaluating design options for both off-grid and grid-connected power systems for remote, stand-alone, and distributed generation (DG) applications. HOMER's optimization and sensitivity analysis algorithms allow you to evaluate the economic and technical feasibility of a large number of technology options and to account for variation in technology costs and energy resource availability.
- **Mitigation Impact Screening Tool** (MIST) (http://www.epa.gov/heatisland/resources/tools.html#MIST) - MIST is a software tool that estimates the impacts of urban heat island mitigation strategies on urban air temperatures, ozone, and energy consumption.
- **Personal Emissions Calculator** (EPA) - http://epa.gov/climatechange/emissions/ind_calculator.html: provides an estimate of your personal or household's greenhouse gas emissions, along with actions you can take to lower your emissions while reducing you energy and waste disposal costs.

Regional Resources:

Western Region:

- **Western Climate Initiative (WCI)** - http://www.westernclimateinitiative.org/: WCI is identifying, evaluating and implementing collective and cooperative ways to reduce greenhouse gases in the region.
- **Opportunities for Appliance and Equipment Efficiency Standards in Texas** (ACEEE, 2006) http://aceee.org/pubs/a063.pdf?CFID=2342054&CFTOKEN=54522154
- **Potential for Energy Efficiency, Demand Response, and Onsite Renewable Energy to Meet Texas's Growing Electricity Needs** (ACEEE, 2007) http://aceee.org/pubs/e073.pdf?CFID=2342054&CFTOKEN=54522154
- **Colorado Renewable Resource Database** (Colorado Governor's Office of Energy Management and Conservation) http://coloradoenergy.org/corrd/: provides information on renewable energy project planning, policy analysis, and energy research in Colorado.
- **Western Governor's Association (WGA) Clean and Diversified Energy Initiative** - http://www.westgov.org/wga/initiatives/cdeac/: information on the initiative with links to publications supporting clean energy.
- **Clean Energy, a Strong Economy and a Healthy Environment** (WGA) http://www.westgov.org/wga/publicat/CDEAC06.pdf: report on the WGA Clean and Diversified Energy Initiative, includes policy recommendations for consideration by Western Governors.
- **WGA Task Force Reports** - http://www.westgov.org/wga/initiatives/cdeac/cdeac-reports.htm#TaskForceReports: reports on advanced coal, biomass, energy efficiency, geothermal, solar, transmission, and wind.
- **The Importance of Fossil and Renewable Energy Technology Integration to Western Energy Development** (Rocky Mountain Institute) http://www.westgov.org/wga/initiatives/cdeac/RMFREPpaper.pdf: presents opportunities for integrating fossil and renewable energy in the West and provides policy recommendations.
- **Balancing Cost and Risk: The Treatment of Renewable Energy in Western Utility Resource Plans** (Lawrence Berkeley National Laboratory) http://eetd.lbl.gov/ea/ems/reports/58450.pdf: examines how twelve western utilities treat renewable energy in their recent resource plans.
- **Northwest Power and Conservation Council** http://www.nwcouncil.org/
- **Pacific Northwest Demand Response Project (PNDRP)** is a collaborative process to encourage the appropriate development of demand response in the region. http://www.nwcouncil.org/energy/dr/Default.asp
- **State-Level Energy Plans:**
  - California Energy Action Plan: Implementation Roadmap for Energy Policies (2005) - http://www.energy.ca.gov/energy_action_plan/2005-09-21_EAP2_FINAL.PDF
  - California Integrated Energy Policy Report (2005) - http://www.energy.ca.gov/2005publications/CEC-100-2005-007/CEC-100-2005-007-CMF.PDF
  - Status of Energy in Nevada (2005) - http://energy.state.nv.us/2005%20Report/2005%20Report.htm
  - 2007 Idaho Energy Plan - http://www.idwr.idaho.gov/energy/energy_plan_0126.pdf
  - State of Oregon Energy Plan 2005-2007 - http://www.oregon.gov/ENERGY/docs/EnergyPlan05.pdf
  - 2006 Energy Advisor Report to the Utah Legislature: Energy Policy and Development in Utah - http://energy.utah.gov/energy/docs/Legislative_Report.pdf
  - Utah Energy Efficiency Strategy - http://energy.utah.gov/energy/utah_energy_efficiency_strategy.html
  - Hawaii Energy Strategy - http://www.hawaii.gov/dbedt/info/energy/planning/hes/

    - Oregon's Renewable Energy Action Plan (2005) - http://egov.oregon.gov/ENERGY/RENEW/docs/FinalREAP.pdf
- **Climate Change Action Plans:**
    - Arizona Climate Change Action Plan August 2006 - http://www.azclimatechange.gov/download/O40F9347.pdf
    - Climate Action Team Report to Governor Schwarzenegger and the Legislature - http://www.climatechange.ca.gov/climate_action_team/reports/2006-04-03_FINAL_CAT_REPORT.PDF
    - Climate Action Team Proposed Early Actions to Mitigate Climate Change in California - http://www.climatechange.ca.gov/climate_action_team/reports/2007-04-20_CAT_REPORT.PDF
    - Colorado Climate Action Plan (2007) - http://www.pewclimate.org/docUploads/COClimatePlan_0.pdf
    - Hawaii Climate Change Action Plan (1998) - http://www.hawaii.gov/dbedt/info/energy/publications/ccap.pdf
    - Montana Climate Change Action Plan (2007) - http://www.mtclimatechange.us/CCAC.cfm
    - New Mexico Climate Change Advisory Group (2006) - http://www.nmclimatechange.us/ewebeditpro/items/O117F10150.pdf
    - Oregon Strategy for Greenhouse Gas Reductions (2004) - http://www.sustainableoregon.net/documents/climate/Oregon_Strategy_Final_Report.pdf
    - Blue Ribbon Advisory Council on Climate Change: Report to Governor Jon M. Hunstman, Jr. - http://www.deq.utah.gov/BRAC_Climate/final_report.htm
    - Greenhouse Gas Mitigation Options for Washington State (2002) - http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/RAMR5ERKNX/$File/washington%20action%20plan.pdf

Mid-Atlantic Region:

- **Mid-Atlantic Distributed Resources Initiative (MADRI)** - http://www.energetics.com/madri/: information pursuant to the goal of identifying and removing retail barriers to the deployment of distributed generation, demand response and energy efficiency in the Mid-Atlantic region.
- **Impact of Demand Curtailment on Power Prices in PJM** http://www.energetics.com/madri/pdfs/BrattleGroupReport.pdf: a report by The Brattle Group that was commissioned by PJM and MADRI.
- **State-Level Energy Plans:**
    - District of Columbia Comprehensive Energy Plan 2003-2007 - http://dceo.dc.gov/dceo/frames.asp?doc=/dceo/lib/dceo/DC_Comprehensive_Energy_Plan_III.pdf
    - New York State Energy Plan (2005) - http://www.nyserda.org/Energy_Information/energy_state_plan.asp
    - West Virginia's Energy Roadmap 2001-2020 - http://www.wvenergyroadmapworkshops.org/reports/WestVirginiaEnergyRoadmap08-20-02.pdf
    - Bright Ideas for Delaware's Energy Future (2003) - http://www.delaware-energy.com/Download/Delaware%20Energy%20Task%20Force%20-%20Full%20Text%20Version.pdf
    - Energy Efficiency and Renewable Energy Resource Development Potential in New York State (2003) - http://www.nyserda.org/sep/EE&ERpotentialVolume1.pdf
    - New Jersey Board of Public Utility Strategic Plan (2005) - http://www.bpu.state.nj.us/tmp/NJBPUStrategicPlan.pdf

    - The Virginia Energy Plan - http://www.governor.virginia.gov/TempContent/2007_VA_Energy_Plan-Full_Document.pdf
- **Climate Change Action Plans**:
    - Delaware Climate Change Action Plan (2000) - http://ceep.udel.edu/publications/globalenvironments/reports/deccap/fullreport.pdf
    - GHG Emissions Reductions in Maryland, Volume I: Current State Government Activities (2004) http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/JMSY5ZBGXC/$File/GHG%20Volume%20I%20Final.pdf
    - Recommendations to Governor Pataki for Reducing New York State Greenhouse Gas Emissions (2003) - http://www.ccap.org/pdf/04-2003_NYGHG_Recommendations.pdf
    - Pennsylvania Climate Change Roadmap - http://www.pecpa.org/FINAL%20PEC%20Roadmap%20Complete%20Report.pdf

Midwest Region:

- **Environmental Law and Policy Center website** - http://www.elpc.org/energy/rps/index.php: provides information on clean energy projects in the Midwest along with a list of resources to help encourage the use of clean energy.
- **Repowering the Midwest: The Clean Energy Development Plan for the Heartland** (Environmental Law and Policy Center) http://www.repowermidwest.org/repoweringthemidwest.pdf: Presents targeted information on the potential for clean energy in the Midwest and policy recommendations that would help encourage clean energy use.
- **Midwest Energy Efficiency Alliance** http://www.mwalliance.org/
- **Midwest Demand Response Initiative** http://misostates.org/MWDRI%20list.htm
- **State-Level Energy Plans:**
    - Kansas Energy Plan (2007) - http://kec.kansas.gov/energy_plan/energy_plan.pdf
    - Hoosier Homegrown Energy: Indiana's Strategic Energy Plan (2006) - http://www.in.gov/energy/strategicplan/Energy%20Strategic%20Plan%201.2.pdf
    - Michigan's 21st Century Electric Energy Plan (2007) - http://www.michigan.gov/documents/mpsc/21stcenturyenergyplan_185274_7.pdf
    - 2004 Iowa Energy Plan Update http://www.iowadnr.com/energy/news/publications.html
    - Iowa Energy Policy Taskforce Report Update (2005) http://www.iowadnr.com/energy/info/taskforce/tf_update.pdf
    - Illinois Sustainable Energy Plan (2005) - http://www.commerce.state.il.us/NR/rdonlyres/26A736D5-6B18-46CC-90DA-FB900EBA3DDF/0/IllinoisSustainableEnergyPlan.pdf
    - Missouri Energy Task Force Action Plan (2006) - http://www.psc.mo.gov/news/metf/Task_Force_%20Report_083106.pdf
- **Climate Change Action Plans:**
    - A Climate Change Action Plan for Illinois (1994)- http://dnr.state.il.us/orep/inrin/eq/iccp/toc.htm
    - Iowa Greenhouse Gas Action Plan (1996) - http://atmos.cgrer.uiowa.edu/research/reports/iggap/FinalReport.pdf
    - Minnesota 2004 Energy Policy and Conservation report - http://www.state.mn.us/mn/externalDocs/Commerce/Quadrennial_Report__2004_071404102049_2004-QuadReport.pdf
    - Minnesota Climate Change Action Plan: A Framework for Climate Change Action (2003) - http://www.pca.state.mn.us/publications/reports/mnclimate-action-plan.pdf

    - Missouri Action Options for Reducing Greenhouse Gas Emissions (2002) - http://www.dnr.mo.gov/pubs/pub1447.pdf
    - Wisconsin Climate Change Action Plan - http://www.dnr.state.wi.us/org/aw/air/global/WICCAP.pdf

Southeast Region:

- **Potential for Energy Efficiency and Renewable Energy to Meet Florida's Growing Energy Needs** (ACEEE, 2007) http://aceee.org/pubs/e072.pdf?CFID=2342054&CFTOKEN=54522154
- **Southern Alliance for Clean Energy website** - http://www.cleanenergy.org/: contains a number of publications about clean energy actions throughout the Southern states.
- **Leadership by Example: Energy Efficiency and Conservation** (Florida Dept. of Environmental Protection) - http://www.dep.state.fl.us/energy/reports/files/energy_leadership_report.pdf: presents information on Florida's state government leading by example in energy efficiency and conservation programs.
- **State-Level Energy Plans**:
    - State Energy Strategy for Georgia (2006) - http://www.georgiaenergyplan.org/suppmat/STATE_ENERGY_STRATEGY_FINAL_12_14_06.pdf
    - Kentucky's Energy Opportunities for Our Future: A Comprehensive Energy Strategy - http://www.energy.ky.gov/NR/rdonlyres/8E6F3FFE-5DC6-4FC6-9B5A-EA9D2AC89E7A/0/KentuckyEnergyPlan.pdf
    - South Carolina Energy Office Strategic Energy Action Plan FY 2007-2008 - http://www.energy.sc.gov/index.aspx?m=1&t=6&h=24
    - Florida's Energy Plan (2006) - http://www.oe.netl.doe.gov/docs/prepare/florida2006energy_plan.pdf
- **Climate Change Action Plans**:
    - Policy Planning to Reduce Greenhouse Gas Emissions in Alabama (1997) http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/SVDN5QRPPJ/$File/Alabama_action_plan.pdf
    - Climate Change Mitigation Strategies for Kentucky (1998) - http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/RAMR5ECR9B/$File/ky_2_fin.pdf
    - Tennessee Greenhouse Gas Emissions: Mitigation Strategies (1999) - http://www.state.tn.us/ecd/pdf/greenhouse/entiredocument.pdf

New England:

- **Energy Efficiency in New England: Resource Opportunities** (RAP, 2007) http://www.raponline.org/Pubs/RS-EE%20in%20New%20England.pdf: reviews the history of energy efficiency activities in New England, the status of current efforts, the potential for additional cost-effective investments, and key challenges to the development of a regional approach to acquiring efficiency resources.
- **Energy Efficiency and Renewable Energy: A Growing Opportunity for Massachusetts** (Massachusetts Technology Collaborative) http://www.masstech.org/IS/reports/clusterreport11405.pdf: analyzes the clean energy and "cleantech" companies in Massachusetts and the economic development opportunities of a "clean energy" cluster.
- **Regional Green House Gas Initiative (RGGI)** - http://www.rggi.org/agreement.htm: a cooperative effort by nine Northeast and Mid-Atlantic states to discuss the design of a regional cap-and-trade program covering carbon dioxide emissions from power plants in the region.

- **Vermont Electric Energy Efficiency Potential Study** (Vermont Dept. of Public Service) http://publicservice.vermont.gov/energy-efficiency/vteefinalreportjan07v3andappendices.pdf: estimates the achievable cost effective potential for electric energy and peak demand savings from energy-efficiency and fuel conversion measures in Vermont.
- **NESCAUM (Northeast States for Coordinated Air Use Management)** http://www.nescaum.org/: provides scientific, technical, analytical, and policy support to the air quality programs of the eight Northeast states.
- **Northeast Energy Efficiency Partnerships** http://www.neep.org/: provides resources to promote energy efficiency in homes, buildings, and industry in the Northeast.
- **Massachusetts Technology Collaborative: Renewable Energy Trust** http://www.masstech.org/renewableenergy/index.html: resources to promote clean energy technologies.
- **Ozone Transport Commission High Electric Demand Day (HEDD) Activity** http://www.otcair.org/document.asp?fview=meeting: These activities looked at emission reduction strategies on HEDD.
- **State-Level Energy Plans**:
  - 2007 Energy Plan for Connecticut - http://www.ctenergy.org/images/2007_Energy_Plan.doc
  - Connecticut's Energy Vision for a Cleaner, Greener State - http://www.ct.gov/governorrell/lib/governorrell/ctenergyvisionsept19.pdf
  - New Hampshire Energy Plan (2002) - http://www.nh.gov/oep/programs/energy/StateEnergyPlan.htm
  - Rhode Island Energy Plan - http://www.planning.ri.gov/sgp/pdf/781.pdf
  - Vermont Electric Plan 2005 - http://publicservice.vermont.gov/pub/state-plans/state-plan-electric2005.pdf
  - Massachusetts Lead by Example Executive Order http://www.mass.gov/envir/Sustainable/pdf/07_eo484.pdf
- **Climate Change Action Plans**:
  - Connecticut Climate Change Action Plan (2005) - http://ctclimatechange.com/StateActionPlan.html
  - Maine Climate Action Plan (2004) - http://maineghg.raabassociates.org/finalplan.asp
  - The Climate Change Challenge: Action New Hampshire Can Take to Reduce Greenhouse Gas Emissions (2001) - http://www.des.state.nh.us/ard/climatechange/challenge.pdf
  - Rhode Island Greenhouse Gas Action Plan (2002) - http://righg.raabassociates.org/Articles/GHGPlanBody7-19-02FINAL.pdf
  - Massachusetts Climate Protection Plant (2004) http://www.massclimateaction.org/pdf/MAClimateProtPlan0504.pdf