

# Catalog of State Climate Actions: Residential, Commercial, and Industrial Sectors

A catalog of sample state-level GHG-reducing actions and policy options based on actions undertaken or considered by state, local, and private actors.

## **Example State Greenhouse Gas Pollution Reduction Policy Actions**

### **Energy Efficiency Programs, Funds, and Goals**

- Utility demand-side management (DSM) for electricity (including expansion of same)
- Utility demand-side management (DSM) for natural gas, propane, and fuel oil
- Non-utility demand-side management (DSM) programs for electricity
- Energy efficiency funds (e.g., public benefits funds) administered by state agency, utility, or third party (e.g., Energy Trust)
- · Regional market transformation alliance
- Reduced cost or free residential energy audits
- Reduced cost energy audits for businesses
- Low-cost loans for energy efficiency improvements
- Saving energy, savings sales tax
- Reduce energy use by 10% in state-owned buildings

#### **Buildings**

- Improved building codes for energy efficiency
- Training of building code officials and other officials in energy code enforcement
- Improved design and construction, "government lead-by-example"
- Increased use of blended cement (substituting fly ash or other pozzolans for clinker)
- Support for energy-efficient communities planning, "Smart Growth"

- Promotion and incentives for improved design and construction (e.g., green buildings, Leadership in Energy and Environmental Design Green Building Rating System™ [LEED]) in the private sector
- Feebate program to encourage energy efficiency in building design
- Incentives for retrofit of existing residential buildings
- Training and education for builders and contractors (e.g., heating, ventilation, and air conditioning [HVAC], sizing, duct sealing)
- Energy management training / training of building operators

#### **Appliance Standards**

- Expansion of state-level appliance efficiency standards
- Support for federal-level appliance efficiency standards
- Require high-efficiency appliances in new construction and retrofits

#### **Education and Outreach**

- Consumer education programs
- Energy efficiency in the school curriculum
- Truth-in-advertising campaign
- In-home energy displays

#### **Pricing and Purchasing**

- Green Power purchasing for consumers
- Net-metering for distributed generation
- Time-of-use rates
- Tiered (increasing block) rates for electricity and natural gas use
- Bulk purchasing programs for energy efficiency or other equipment

#### **Customer-Sited Distributed Energy and Combined Heat and Power**

- Incentives to promote implementation of renewable energy systems
- Incentives and resources to promote combined heat and power (also known as cogeneration or cogen)
- Efficient transformers on the customer side of the meter
- · Incentives for passive solar heating
- White roofs, rooftop gardens, and landscaping (including shade tree programs)

- Focus on specific end-uses and technologies
- · Passive solar heating design
- Solar hot water heating
- Appliance recycling and pick-up programs

# Non-Energy Emissions (hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], sulfur hexafluoride [SF<sub>6</sub>], and carbon dioxide [CO<sub>2</sub>] process emissions)

- Voluntary industry–government partnerships
- Promotion and funding for leak reduction and capture, recovery, and recycling of process gases
- Promotion and funding for process changes and optimization
- Use of alternative gases (other HFCs, hydrocarbon coolants and refrigerants)

#### **GHG Emissions—Specific Goals and Policies**

- Support for switching to less carbon-intensive fuels (coal and oil to natural gas or biomass)
- Industry-specific emissions cap-and-trade program
- Negotiated emissions or energy savings agreements
- Local government program for voluntary emissions targets by businesses
- Provide tools and information for residents, businesses, and communities to perform GHG inventories

#### Other

- Government agency requirements and goals
- Reduce energy use by 10% in state-owned buildings
- State building carbon-neutral requirement
- Municipal energy management
- Statewide effort to retrofit existing buildings (residential, commercial, public, and industrial) for energy efficiency
- Focus on specific market segments
- Energy efficiency reinvestment funds
- Industrial audits
- · Focus on industrial ecology and by-product synergy