



U.S. EPA Region 5 Framework for Addressing Climate Change and Clean Energy

U. S. Environmental Protection Agency Region 5 recognizes the need to address climate change and reduce greenhouse gas emissions in our six states. Climate models predict increased variability in precipitation, with longer droughts and larger storms, boosting the need for water conservation and prevention of sewer overflows. With our public and private partners, we will evaluate our programs and policies for opportunities to address the effects of climate change on the environment and to promote energy efficiency, clean energy, cleaner transportation practices and sustainable development. Many governments and organizations in the region are working to reduce greenhouse gas emissions. Region 5 will use its leadership role to add value to these efforts by focusing on:

- **Changing how our energy is produced**
- **Changing how our energy is used**
- **Changing how materials, products and waste are managed**
- **Integrating climate change considerations into Agency operations and core programs**

We will engage and promote environmental stewardship among key stakeholders in Region 5 including the public; federal, state, tribal and local governments; and electric power utilities and other large companies.

Changing How Our Energy Is Produced

One-third of greenhouse gas emissions in the U.S. come from electric power generation. Seventy percent of the region's electricity is generated from coal, which produces more greenhouse gas emissions per kilowatt produced than other fossil fuels. We will:



- Challenge electric utilities in the region to reduce their greenhouse gas emissions through measures such as increased renewable energy production and energy efficiency programs to decrease costs to households and businesses
 - Encourage governments and corporations to purchase renewable energy through EPA's Green Power Partnership
 - Promote the use of combined heat and power systems, focusing initially on wastewater treatment plants, ethanol facilities and large hotels and casinos
- Collaborate with Region 5 states to promote combined heat and power and energy efficiency through state regulations

Changing How Our Energy Is Used

Electricity and fuel use in homes, commercial buildings and industries result in 62 percent of U.S. greenhouse gas emissions (17, 17, and 28 percent, respectively). Transportation contributes much of the rest—28 percent. We will:

- Provide information to the public to help them green their homes, schools, workplaces and cars through measures such as energy conservation, recycling and fuel-efficient transportation
- Reduce energy use in communities by:
 - Recruiting local governments to take the ENERGY STAR Challenge and assisting them in improving energy efficiency in government, residential and commercial buildings in their communities



- Promoting green building and sustainable development on the state, local and developer level to address the engineering and market barriers that limit such development
- Training wastewater and drinking water utilities to conduct energy audits at their facilities to reduce energy use and encourage on-site energy production
- Call on large companies in Region 5 to join the Climate Leaders and Performance Track programs; Climate Leaders works with companies to inventory their greenhouse gas emissions, develop a plan to reduce those emissions and set a public reduction goal
- Recruit new partners to the SmartWay Transport Partnership, a voluntary program that reduces greenhouse gas emissions from the freight industry
- Work with other federal agencies, states and industry to expand the use of agricultural waste digesters through innovative permitting and funding mechanisms

Changing How Materials, Products and Waste Are Managed

Reducing waste and increasing recycling and reuse of materials saves energy and reduces greenhouse gas emissions by avoiding effects associated with resource extraction and waste disposal. We will:

- Promote reduction of municipal, industrial and construction waste in the region
- Recruit governments and companies to become partners in the WasteWise program; WasteWise works with Region 5's partners to reduce nonhazardous waste through measures such as use of recycled materials
- Collaborate with large public venues such as stadiums and convention centers to make them Green Venues, using practices such as energy efficient heating and cooling systems, increased recycling, use of local food in concessions, and environmental outreach to the millions of people who visit these venues



Integrating Climate Change Considerations into Agency Operations and Core Programs

We will:

- Seek to include greenhouse gas reductions in Supplemental Environmental Projects that result from enforcement settlements within Region 5 and incorporate climate change considerations into reviews of Environmental Impact Statements



- Educate our employees so they can reduce their carbon footprint at home, at work and in their communities; for example, we will encourage employees to switch to compact fluorescent lamps (CFLs) and recruit organizations in their community to become Change-a-Light Pledge Drivers
- Review and revise policies to improve environmental performance of Region 5 operations in areas such as energy efficiency, use of alternative fuels, reduction of paper use and fleet fuel economy