

CITY OF OAKLAND



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Under 2 MOU – Appendix City of Oakland, California, USA

The City of Oakland, California, is a local, regional, and national environmental leader. Located in the heart of the San Francisco Bay Area, it is one of the United States' most racially and ethnically diverse cities. City staff work closely with nonprofits, other cities, and regional agencies to make Oakland an ever more sustainable, vibrant, and resilient place to live.

Oakland is home to more than 410,000 residents, with more than 5% population growth since 2010. Oakland's Gross Regional Product (GRP) in 2012 was more than \$26.75 billion, and that number has continued to increase. More than 39,400 firms are located in Oakland, including more than 350 clean tech and green tech companies. At 55.79 square miles, Oakland sits at the center of the region's major subway network, the Bay Area Regional Transit (BART), and is home to a major international port. More than a quarter of the city's residents are foreign-born.

Oakland's Energy and Climate Action Plan

Oakland's aggressive approach to reducing GHG emissions and enhancing climate resilience was codified in its Energy and Climate Action Plan (ECAP), adopted in December 2012. The ECAP was created with input from over 30 environmental and social justice organizations including the Oakland Climate Action Coalition (OCAC), and through dozens of community events in multiple languages, engaging more than 1,000 low-income and residents of color. It includes an overall goal of reducing total GHG emissions to 36% below 2005 levels by 2020, on the path toward 83% below 2005 levels by 2050. Already, much progress has been made across all critical areas of the plan, with 10% emissions reductions documented between 2005-2013.

Climate Change is a Social Equity Issue

Behind Oakland's ambitious numerical goals is an important human story. Oakland's unique sustainability work is conducted through a lens of social equity. City leaders view climate change as a critical component of social justice and fairness, one that is solvable only if all members of our community benefit equally from our actions, and one that is tied inextricably to all facets of public wellbeing. Accordingly, public engagement and public-private partnerships are central to our work. Of more than 150 specific actions contained in the ECAP, one-third arose directly from community input.

The City partners with numerous local organizations to understand our communities' needs, solicit feedback on our ongoing efforts, and ensure that initiatives properly address the broad range of community needs. Oakland maintains a bevy of outreach channels, including 12 Community Benefit Districts, a Specific Plan engagement processes, and the sustainability-oriented Oakland Fund for Children and Youth.

Solid Waste and Consumption

The materials and waste section of Oakland's ECAP notably recognizes the tremendous importance of reducing consumption as a climate action, and, indeed, this has been the City's greatest area of improvement. The City adopted a Zero Waste Goal and Zero Waste Strategic Plan in 2006. From 2005 to 2013, the city reduced its materials' use and waste emissions by 26% from a consumption perspective, and 62% from a core perspective. During that time period, composting increased 18% from baseline as a result of increased requirements. The City also increased recycling by 33% and reduced landfill waste by 27% from 2000 to 2013. Today there are over 35 recycling and reuse oriented firms in Oakland, employing 1,000+ individuals.

Additional actions contributing to Oakland's success include adoption of a Construction and Demolition debris ordinance in 2000; launching residential curbside compost collection citywide in 2005; instituting a city-wide polystyrene ban in 2006 for all restaurants and City facilities; launching one of the first municipal plastic bag bans in the country in 2007, which was subsequently championed by the County and adopted by the State of California in 2014; and mandating compost collection for all commercial customers in 2015. Moving forward, the City is continuing its industry-leading zero waste work, including working to eliminate all recyclable and compostable materials from the waste stream.

Buildings and Energy Use

Oakland's ECAP specifies a strategy to reduce electricity consumption 32% and natural gas consumption 14% below 2005 levels by 2020 through conservation, building retrofits, solar hot water, and addition of renewable energy technologies. In 2013, our core building and energy emissions were 7% lower than 2005 levels. By continuing to focus on making buildings more efficient, the City is working to take the first step in reducing emissions. By focusing long term on transitioning buildings to a power system independent of natural gas, the City is addressing long term emissions goals. The City is continuing its work with energy efficiency and solar providers, community and business leaders, regional government agencies, external funders, and the local electric and gas utility to accelerate demand reduction in order to meet our 2020 and 2050 targets. Oakland has a long history of providing energy efficiency and related services to the community, including in partnership with the regional electric and gas utility, and of enacting policies to further strengthen our work.

Among Oakland's accomplishments, the City has negotiated LEED certification into large private development projects since 1999, and adopted municipal green building requirements in 2005 and a Private Sector Green Building Ordinance in 2010. The City will install 999 kW of solar power at two City facilities in 2016, and has worked over the past several years to create a streamlined permitting process for solar installations that has resulted in 2,323 residential PV systems and 557 commercial systems installed as of the end of 2014, as well as a total of 3.63

MW installed at Oakland Unified School District sites. The City converted over 30,000 street lights to LEDs, and completed energy efficiency retrofits in the 106 largest municipal facilities. Oakland co-founded a regional government-utility energy efficiency partnership with the largest investor-owned utility in California, delivering innovative, direct-installation energy efficiency services to local business since 2002, including through a \$5 million Federal grant to provide new lighting and wireless HVAC controls.

Oakland's plans to continue our progress in reducing energy demand and energy-related emissions include ongoing retrofits on City facilities, pursuing zero-net energy in existing building retrofits and selected new developments, further strengthening our green building codes, providing enhanced retrofit assistance to residents and businesses, and pursuing a commercial benchmarking policy that would entail energy use disclosure and building upgrade incentives.

Transportation and Land Use

The ECAP aims to reduce vehicle miles traveled by 20% and save 24 million gallons of oil (gasoline) annually by shifting transportation modes away from single vehicle occupant use and toward public transit, walking, and biking, and shifting toward more efficient and alternative fuel vehicles. In 2013, our core transportation emissions were 7% lower than 2005 levels and our consumption-based transportation emissions were 12% lower than in 2005.

Progress to date has included dedicating over \$20 million in the regional Metropolitan Transportation Commission's One Bay Area funding to support bicycle and pedestrian access in seven Priority Development Areas; performing continuous investments in the city's bikeway network, with over 150 bikeway miles and over 3% bicycle mode share as of 2015; currently constructing a 9.5-mile hybrid electric Bus Rapid Transit (BRT) corridor through some of Oakland's most disadvantaged communities, with \$28 million in infrastructure improvements and business development support for merchants along the route; converting 20% of the city's vehicle fleet to fuel-efficient and alternative fuel vehicles; and switching the City's entire fleet of diesel vehicles (250 vehicles, or 230,000 gallons of fuel per year) to renewable diesel, a fuel with a 60%-70% lower emissions profile than standard diesel fuel.

Future plans to reduce transportation emissions include updating the city's building codes to require minimum electric vehicle infrastructure in new residential and commercial developments and retrofits, continued expansions of the city's bikeway network, ongoing enhancements to local public transportation networks, new car and bike sharing programs, and continued focus on transportation-oriented development.

Resilience and Adaptation

The ECAP's adaptation section lays out an ambitious strategy for evaluating the local impacts of climate change and acting to address those changes. Oakland's geology and climate make our city far too familiar with disaster, ranging from earthquakes to firestorms. Climate scenarios predict that Oakland faces rising sea levels, flooding, and prolonged drought. Oakland's climate resilience priorities include: 1) Continuing to accelerate ECAP implementation to reduce GHG emissions; 2) Protecting our residents and infrastructure from rising seas, seismic events, and extreme heat and precipitation events; and 3) Preparing for unavoidable impacts of climate

change on water, electricity, natural gas, and food costs, especially for low-income and non-English speaking residents.

The City of Oakland is a recipient of the Rockefeller Foundation's 100 Resilient Cities grant award, and was among the initial 33 cities – selected from nearly 400 cities across six continents – chosen by distinguished leaders from around the world. Selections were based on how the city planned to approach and build greater resilience at the city scale, implementation tactics from civil society and business to academia, and how resilience activities will address the needs of the poor or vulnerable.

Climate adaptation actions to date have included providing 1,396 homes with free rain barrels and cisterns; adopting neighborhood Specific Plans that prioritize transit-oriented sustainable development near major transit hubs; partnering with the regional Bay Conservation and Development Commission (BCDC) to study climate change impacts, vulnerabilities, and potential adaptation strategies for projected sea level rise and associated flooding through BCDC's Adapting to Rising Tides Pilot Program, with a project area that includes all of Oakland's shoreline, chosen based on community interest, capacity for participation, and the presence of regionally significant transportation infrastructure; and implementing award-winning storm water management and wetland restoration projects.