
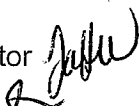



**STAFF REPORT TO THE CITY COUNCIL
FOR CONSIDERATION AT THE MEETING OF JUNE 23, 2009**

Prepared by: Nicholas Tagas, Climate and Energy Assistant 
Reviewed by: Julie Haas-Wajdowicz, Environmental Resources Coordinator 
Approved by: Joseph G. Brandt, Director of Community Development 
Date: May 26, 2009
Subject: Establish Carbon Emissions Reduction Targets for Antioch

RECOMMENDATION

It is recommended that the City Council adopt the attached resolution establishing carbon emission reduction to the 1990 level, a target reduction of approximately 25% by 2020, and an 80% reduction by 2050 as mandated by the State of California through AB-32 *Global Warming Solutions Act (2006)*.

BACKGROUND INFORMATION

Statewide Climate Protection

The State of California has placed itself in the forefront of the issue of greenhouse gas (GHG) reduction and climate change prevention, and as a result, awareness has been raised. California is the fifteenth largest emitter of greenhouse gases on the planet; representing about 2% of worldwide emissions.

In 2006, Governor Schwarzenegger signed into law State Assembly Bill 32: *Global Warming Solutions Act (AB32)*. AB 32 requires that by 2020 the state's greenhouse gas emissions be reduced to 1990 levels, a roughly 25% reduction under business as usual estimates. The California Air Resources Board (ARB), under the California Environmental Protection Agency, is to prepare plans to achieve the objectives stated in the Act.

AB 32 Implementation Timeline

- January 1, 2009
 - ARB will prepare and approve the scoping plan for achieving 2020 statewide GHG emissions limit.
- January 1, 2010
 - ARB will implement early action emission reduction measures (identified in June 2007), effective immediately.

- January 1, 2011
 - ARB will adopt GHG emissions limits and emission reduction measures based on January 2009 scoping plan, effective in one year.
 - ARB may adopt a market-based cap & trade system with associated limits on state's GHG sources applicable from January 1, 2012 to December 31, 2020.

- January 1, 2012
 - Regulations based on January 2009 scoping plan will become effective.
 - Market-based "cap-and-trade" regulations may become effective. 2020 Deadline for state to achieve 1990 levels of GHG emissions.

Local Climate Protection

In 2007 the Council unanimously approved Resolution 2007/69 authorizing the City of Antioch to join ICLEI's-Local Governments for Sustainability Cities for Climate Protection Campaign. Antioch is one of over 500 cities around the world to participate in the Cities for Climate Protection (CCP) campaign, sponsored by ICLEI and as part of the campaign, member cities have committed to:

1. Inventory their emissions of greenhouse gases;
2. Set reduction targets;
3. Develop comprehensive strategies to meet these targets;
4. Implement these emissions reduction actions; and
5. Measure the results.

Antioch's baseline community wide GHG emissions inventory was completed as part of a grant with ICLEI in February 2008. Staff has recently completed the baseline municipal emissions inventory. For the ease of a consistent baseline year, data for 2005 was used in Antioch, as this was the year selected for the majority of jurisdictions in Contra Costa County.

Antioch's community wide greenhouse gas emissions total in 2005 was approximately 300,000 metric tons of carbon dioxide-equivalent emissions. Of that, only around 8,000 tons or 3% were attributable to Antioch's municipal operations. These numbers reflect an extremely thorough approach to calculating emissions using ICLEI's climate action protection software to quantify all equivalent levels of greenhouse gas emissions.

Discussion

Staff has completed a carbon emissions inventory for the City of Antioch; both for the municipality and for the community as a whole. The next step is to set carbon reduction targets and then create a climate action plan to meet those reduction targets. Once reduction targets have been set by the City Council, staff will be able to move forward with developing plans to achieve those goals.

While municipal activities make up only 3% of the total carbon emissions within Antioch city limits, these emissions are under our direct control and therefore are the easiest for us to change. Staff anticipates that the Municipal Climate Action Plan can be completed in-house with input from all departments. For communitywide emission reductions, it would seem prudent to involve the entire community to forge a plan to reduce total carbon emissions within Antioch.

FINANCIAL IMPACT

The work done to date and the completion of the Municipal Climate Action Plan is being funded out of the Waste Reduction Fund (226-5225). To complete the Community Climate Action Plan proposed above the City will need additional funding. Coincidentally, the Federal Government is allocating grant funds through the American Recovery and Reinvestment Act or (ARRA) to local cities and states for various projects. In particular, the City of Antioch is entitled to receive \$885,000 through the Department of Energy in the form of an Energy Efficiency Conservation Block Grant. The goal of this block grant is for each participating city to draft an *Energy Efficient Conservation Strategy*. This strategy must be used to enhance, promote and create sustainable and renewable energy projects that create or retain jobs, reduce carbon emissions, and increase and utilize renewable forms of energy.

OPTIONS

1. Establish carbon emission reduction targets for the City of Antioch that meet the goals set forth in AB 32.
2. Direct staff to discontinue the process of pursuing carbon emission reduction measures.

ATTACHMENTS

- A. (AB 32) Fact Sheet
- B. Antioch Emissions Inventory
- C. Antioch Emissions Charts

RESOLUTION NO. 2009/57

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ANTIOCH ADOPTING GHG REDUCTION TARGETS BY REDUCING OVERALL CARBON EMISSIONS BY 25% (1990 LEVELS) BY 2020 AND 80% REDUCTIONS BY 2050 AS MANDATED BY THE GLOBAL WARMING SOLUTIONS ACT OF 2006 AB-32

WHEREAS, there is a consensus among the world's leading scientists that global warming caused by human emission of greenhouse gases is among the most significant problems facing the world today;

WHEREAS, documented impacts of global warming include but are not limited to increased occurrences of extreme weather events (i.e., droughts and floods), adverse impacts on plants and wildlife habitats, threats to global food and water supplies – all of which have an economic impact on communities and their local governments;

WHEREAS, leading scientists have projected that stabilization of climate change in time to minimize such impacts will require a reduction of global warming emissions to 80 percent below current levels by the year 2050;

WHEREAS, currently the United States is responsible for producing approximately 25 percent of the world's global warming pollutants;

WHEREAS, many leading US companies that have adopted greenhouse gas reduction programs to demonstrate corporate and operational responsibility have also publicly expressed preference for the federal government to adopt precise and mandatory emissions targets and timetables as a means by which to provide a uniform and predictable regulatory environment to encourage and enable necessary and long-term business investments;

WHEREAS, state, regional and local governments throughout the United States are adopting emissions reduction targets and programs and that this effort is bipartisan, coming from Republican and Democratic leadership;

WHEREAS, the US Conference of Mayors has endorsed the US Mayors Climate Protection Agreement, which commits cities to reduction of global warming emissions to 7 percent below 1990 levels by 2012, and calls for a federal limit on emissions;

WHEREAS, the State of California has mandated statewide reduction of greenhouse gas emissions to 80 percent below 1990 levels by 2050;

WHEREAS, more than 100 county leaders signed a letter written by Dane County, Wisconsin, that was sent to the President in March 2006 calling for increased energy investment and development of jobs focused on clean energy technologies;

WHEREAS, cities have a unique role to play in reducing greenhouse gas emissions and preparing for the impacts of climate change through their local jurisdiction over policy areas such as air quality, land use planning, transportation, zoning, forest preservation, water conservation, and wastewater and solid waste management;

ATTACHMENT "A"



AB 32 (Nunez and Pavley)

AB 32 Fact Sheet - California Global Warming Solutions Act of 2006

Establishes first-in-the-world comprehensive program of regulatory and market mechanisms to achieve real, quantifiable, cost-effective reductions of greenhouse gases (GHG).

Makes the Air Resources Board (ARB) responsible for monitoring and reducing GHG emissions. Continues the existing Climate Action Team to coordinate statewide efforts.

Authorizes the Governor to invoke a safety valve in the event of extraordinary circumstances, catastrophic events or the threat of significant economic harm, for up to 12 months at a time.

Requires ARB to:

- Establish a statewide GHG emissions cap for 2020, based on 1990 emissions by January 1, 2008.
- Adopt mandatory reporting rules for significant sources of greenhouse gases by January 1, 2008.
- Adopt a plan by January 1, 2009 indicating how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms and other actions.
- Adopt regulations by January 1, 2011 to achieve the maximum technologically feasible and cost-effective reductions in GHGs, including provisions for using both market mechanisms and alternative compliance mechanisms.
- Convene an Environmental Justice Advisory Committee and an Economic and Technology Advancement Advisory Committee to advise ARB.
- Ensure public notice and opportunity for comment for all ARB actions.
- Prior to imposing any mandates or authorizing market mechanisms, requires ARB to evaluate several factors, including but not limited to: impacts on California's economy, the environment, and public health; equity between regulated entities; electricity reliability, conformance with other environmental laws, and to ensure that the rules do not disproportionately impact low-income communities.
- Adopt a list of discrete, early action measures by July 1, 2007 that can be implemented before January 1, 2010 and adopt such measures.

For More Information:

Please contact the ARB toll-free at (800) END-SMOG/(800) 363-7664 (California only) or (800) 272-4572. For information on the ARB's Climate Change Program, visit www.arb.ca.gov/cc/cc.htm. You may obtain this document in an alternative format by contacting ARB's Americans with Disabilities Act Coordinator at (916) 322-4505 (voice); (916) 324-9531 (TDD, Sacramento only); or (800) 700-8326 (TDD, outside Sacramento).

ATTACHMENT "B"

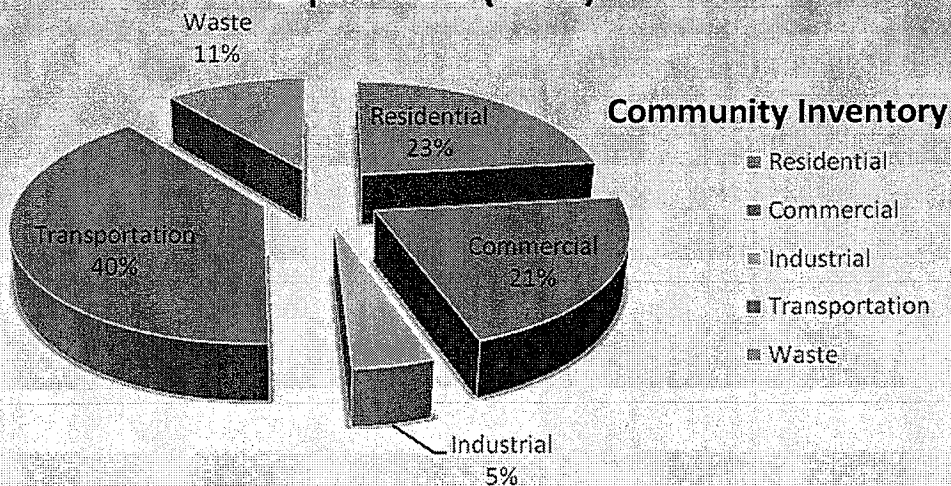
Community Inventory 2005			
Sector	Equiv CO2 (tons)	Equiv CO2 (%)	Energy (MMBtu)
Residential	69,975.0	23.0	2,338,189.0
Commercial	64,500.0	21.0	937,614.0
Industrial	13,578.0	5.0	148,943.0
Transportation	120,476.0	40.0	3,358,315.0
Waste	32,651.0	11.0	0.0
Total	301,179.0	100.0	6,783,061.0

Municipal Operations Inventory 2005				
Sector	Equiv CO2 (tons)	Equiv CO2 (%)	Energy (MMBtu)	Cost (\$)
Buildings	1,173.0	15.0	17,894.0	396,957.0
Vehicle Fleet	1,073.0	14.0	12,624.0	0.0
Employee Commute	402.0	5.0	689,202.0	
Streetlights	1,230.0	16.0	16,280.0	656,058.0
Water/Sewage	3,120.0	40.0	41,848.0	1,351,018.0
Waste	777.0	10.0		0.0
Total	7,775.0	100.0	777,848.0	2,404,033.0

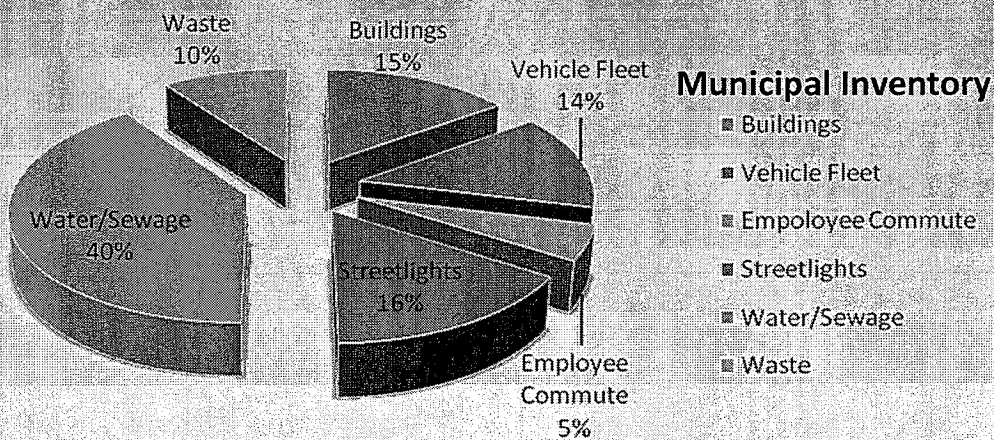
Emissions Breakdown 2005		
Sector	Equiv CO2 (tons)	Equiv CO2 (%)
Community	301,179	97
Govt.	7,775.0	3
Total	308,954.0	100

ATTACHMENT "C"

Equiv CO2 (tons)



Equiv CO2 (tons)



Government is only 3% of Overall Community emissions.

