

A WARMER WORLD— A CHALLENGE AND AN OPPORTUNITY

SUMMARY

On August 31, 2006, the California Legislature passed Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006. AB 32 requires that the state's Green House Gas (GHG) emissions be reduced to 1990 levels by 2020. Included in the most abundant Green House Gases are carbon dioxide, methane and nitrous oxide. The primary sources of GHG due to human action are attributed to transportation (vehicle emissions), energy (electricity generation) and waste (methane from solid waste landfills). The required reduction will be accomplished through an enforceable cap on GHG emissions, which will be phased in beginning in 2012. The California Air Resources Board (CARB) is developing regulations, in accordance with AB 32, which will become enforceable in January 2010. Another bill on the horizon is SB (Senate Bill) 375, which, if passed, would require Regional Transportation Plans (RTPs) to include a "sustainable community strategy" which would reduce vehicle miles traveled in order to meet lower emission standards. Sustainability, at its most basic level, means "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

The County of San Diego, its 18 cities, and the San Diego Association of Governments (SANDAG), have primary responsibility for meeting state environmental mandates. San Diego is fortunate to have a rich knowledge base with its three universities and renowned climate scientists. At least twelve scientists from Scripps Institution of Oceanography participated in the preparation of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), two as lead authors.

At the end of this report is a List of Acronyms and Abbreviations, followed by Appendix A, which is a list of ten simple steps from the San Diego Regional Energy Office and the San Diego Climate Protection Action Plan that can be taken by individuals that will decrease carbon dioxide emissions, and Appendix B, which is the US Conference of Mayors Climate Protection Agreement.

PURPOSE

The purpose of the study is:

- To call attention to the impact of climate change on the San Diego region;
- To review the policies and practices of local governmental agencies in regard to greenhouse gas emission reduction, offering commendation and recommendations as appropriate;

- To suggest ways that San Diego's local governments, working with business, educational and other community organizations, can positively affect climate change issues.

PROCEDURES

Interviews Conducted

- City of San Diego Environmental Services Department Staff
- San Diego City Council Member
- County of San Diego Department of Planning and Land Use Staff
- SANDAG Staff
- Representative of Coast Keeper
- Climate Scientist from Scripps Institute of Oceanography
- Representative of San Diego Foundation
- Representative of Mission Valley Rotary Club
- Representative of the University of San Diego (USD) Energy Office

Materials Reviewed

- City of San Diego Climate Protection Action Plan July 2005
- Conservation Element of the City of San Diego General Plan
- City of Chula Vista Climate Change Working Group Final Recommendations Report
- SANDAG White Paper on Climate Change Planning Issues
- SANDAG White Paper on Regional Habitat Conservation
- US Conference of Mayors 2005 Climate Protection Agreement
- Multiple Species Conservation Plan
- US City Sustainability Rankings – SustainLane 2006
- Letter from the Office of the California Attorney General to the San Diego City Planning Department regarding the General Plan Update
- Letter from the Office of the California Attorney General to SANDAG regarding the Regional Transportation Plan
- Articles from the San Diego Union Tribune, Voice of San Diego, and North County Times
- “Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments” by the Climate Impact Group, University of Washington and King County, Washington
- “Best Practices for Climate Protection-A Local Government Guide” by the International Council for Local Environmental Initiatives

BACKGROUND

The Inter-governmental Panel on Climate Change (IPCC), a Nobel Prize winning assemblage of international scientific scholars, has expressed the conviction that climate change is happening and that human activity is the primary cause. New studies, including the Fourth Assessment Report released by the IPCC in November of 2007, reveal that change is happening and at a faster rate than previously believed. Scientists

warn that a change in direction is needed in order to avoid the worst effects of a warming world.

Climate models used by scientists at the Scripps Institution of Oceanography, University of California San Diego, forecast decreasing rainfall, reduced snow pack in the Sierra, continuing drought and more frequent and intense wildfires. As the population grows and development continues to expand into eastern areas of the County, demand for electricity will increase and additional fossil fuel powered generating facilities will need to be brought on line, which will, in turn, produce more GHG emissions. Climate models indicate sea level rise of seven to twenty-three inches or more by the end of the century, which will result in shoreline erosion and serious damage to coastal communities.

Of special concern is the reality that 90% of the water for the San Diego region is imported from Northern California and the Colorado River, a practice that consumes nearly 20% of the energy used in the state. Computer models at Scripps project a 50% chance that Lake Mead, a key reservoir and source of water for San Diego, will become functionally dry within the next couple of decades. A recently released study shows that outflow exceeds inflow, which means that the system is in peril. There is a major and immediate threat to the region's water supply but local officials, with certain exceptions, express minimal awareness or concern.

San Diego County has more rare, threatened and endangered plant and animal species than any other county in the continental United States. For this reason, it is considered a "national hotspot". Climate change presents a special threat to these resources. An extended drought will result in the increasing loss of forests and native habitat due to susceptibility to disease and invasive pests, and the frequency and severity of wildfire events.

DISCUSSION #1

Response to Climate Change – City of San Diego

The City of San Diego displayed early leadership in recognizing and making plans to address climate change. On January 29, 2002, the San Diego City Council unanimously approved the San Diego Sustainable Community Program with direction to: 1) participate in the Cities for Climate Protection (CCP) program coordinated through the International Council of Local Environmental Initiatives (ICLEI); 2) establish a 15% greenhouse gas (GHG) reduction goal set for 2010, using a 1990 baseline; 3) use the recommendations of a scientific Ad Hoc Advisory Committee as a means to improve the GHG Emission Reduction Action Plan within the City organization and to identify additional community actions.

On January 4, 2004, the Mayor and City Council accepted San Diego's Climate Protection Action Plan that included a recommendation to reduce GHG emissions from City Operations. Also in 2004, the City of San Diego was selected by the US Environmental Protection Agency for the annual Climate Protection Award.

The City of San Diego's July 2005 Climate Protection Action Plan addresses GHG emissions from the total community and specifically, emissions from City operations. Both categories are separated into three components: Energy, Waste and Transportation. City operations, which represent 2% of the total, have steadily reduced its share of GHG emissions through fuel efficiency, energy conservation, the use of renewable energy and the use of methane gas to generate electricity. Unfortunately, the community at large, the other 98%, continues to increase its per capita GHG emissions and at the present rate will not meet AB 32 guidelines. As of 2005, emissions from City operations were 10% below the 1990 baseline but for the total community, emissions were 30% above the 1990 baseline.

In 2005 the mayor of San Diego and six other cities within San Diego County signed the US Conference of Mayors Climate Protection Agreement, which is a pledge to cut GHG emissions to 7 percent below 1990 levels by 2012. The six other cities are Chula Vista, Del Mar, Imperial Beach, La Mesa, Solana Beach and Vista. The agreement (see Appendix B) says, in part, "We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as: 1) Inventory global warming emissions in City operations and in the Community, set reduction targets and create an action plan; 2) Adopt and enforce land use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities; 3) Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit; and 4) Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution." Only two of the signatory cities, San Diego and Chula Vista, have adopted GHG reduction plans within their city operations and established reduction targets.

The City's Climate Protection Action Plan lists 22 policies, initiatives and resolutions related to protecting the environment such as encouraging "green" building, directing growth into compact patterns of development (City of Villages strategy), planning for and implementing development of improved public transit, implementing water reclamation/reuse, using recycled products and using alternative fuels. Most of the policies establish guidelines, call for "encouragement", or are expressed in very general terms that do not include timetables and specific actions. Few are being implemented and none are reviewed annually, as called for in the Plan.

One climate friendly policy that is being implemented is San Diego City Council Policy No. 900-14, the Sustainable Building Policy effective May 29, 2003. Leadership in Energy and Efficiency Design (LEED) is the US Green Building Council's national program for certifying environmentally sustainable design, construction and resource practices for the American building industry. There are five key sustainability aspects of the design and construction processes: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. There are four levels of LEED certification – certified, silver, gold and platinum. Each level is reached by obtaining points from the LEED rating system that offers 7 prerequisite points and 69

elective points. LEED certified level requires 26-32 points, silver level, 33-38 points, gold level, 39-51 points and platinum level 52 plus.

City Council Policy No. 900-14 commits the City to achieving at least LEED “Silver” Level Certification for all new City facilities and major renovation projects of over 5,000 square feet and provides expedited processing for private LEED construction. A LEED Accredited Professional approves buildings for certification. The City currently has 15 LEED certified buildings and many more (68) that are registered for review.

The Climate Action Plan states, “The City of San Diego can do more as an organization through policies and practices to reduce the volume of GHG emission. However, if the largest one-hundred companies in San Diego put forward the same level of commitment, actively working to reduce GHG emissions associated with their energy, water and transportation operations, we would be much closer to reaching the 2010 target for the community.” This observation suggests an educational/leadership role for the City.

The City of San Diego adopted the General Plan Update on March 10, 2008, completing a process that began in 1999. In June 2007, the Office of the California Attorney General sent a letter to the City complimenting it on having adopted a Climate Action Plan in 2005, signing the US Mayor’s Climate Protection Agreement, and adopting smart growth planning measures. However, the Climate Action Plan primarily addresses GHG emissions attributed to City operations, which only comprise 2% of the total, and does not address the other 98% from residences and businesses. Also, mitigation measures in the General Plan frequently state goals or preferences without any commitment to adopt or enforce.

In response to the California Attorney General, input from the Natural Resource and Culture Committee, and public comment, the section in the General Plan Conservation Element on Climate Change and Sustainable Development was revised and strengthened to include City Council, Policy CE-A.2:

“Reduce the City’s carbon footprint. Develop and adopt new or amended regulations, programs and incentives as appropriate to implement the goals and policies set forth in the San Diego General Plan to:

- Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;
- Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;
- Improve energy efficiency, especially in the transportation sector and buildings and appliances;
- Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration.
- Reduce waste by improving management and recycling programs;
- Plan for water supply and emergency reserves.”

The City Planning and Community Investment Department (CPCI) and the Environmental Services Department (ESD) are to be commended for developing and strengthening GHG reduction policies. The new policies in the Conservation Element provide a framework for a leadership position on climate change issues, but regulations and measurable targets and timetables need to be adopted and implemented in order to comply with the mandate of AB 32.

Although a frontrunner in expressing early support for sustainability, in the 2006 US Sustainability rankings of the 50 largest cities in the nation, San Diego ranks only 17th. Numbers one, two and three respectively are Portland, San Francisco and Seattle. Cities are evaluated on 15 indicators including public transit, renewable energy, local food, tap water quality, knowledge base, air quality and development approaches. San Diego scored highest in “knowledge base” but compared unfavorably in housing affordability, tap water quality, city commuting and metro congestion. San Diego is described, however, as an emerging leader that “...needs to invest in public transportation so that using it becomes an everyday experience for more residents.”

An article in the February 13, 2008 Popular Science magazine published a list of America’s greenest cities. There were 14 California cities on the list (more than any other state) but San Diego did not make the cut. Portland ranked highest with San Francisco second. The selection was based on data from the US Census and the National Geographic Society’s Green Guide. Four categories were considered including electricity from renewable sources; transportation based on commuting patterns by public transit and air quality levels; green living, based on the number of green buildings certified by the US Green Building Council; and the comprehensive level of a city’s recycling program. As America’s top green city, half of Portland’s power comes from renewable sources, a quarter of the workforce commutes by bike, carpool or public transportation, and it has 35 LEED certified buildings.

At a recent meeting of the San Diego City Council Natural Resources and Culture Committee, the Environmental Services Department (ESD) described its involvement in a “Green Cities California” program wherein Ten California Cities are collaborating in advancing sustainable practices. ESD also announced formation of the new “City Green Team” monthly meetings with representatives of City Planning and Community Investment, ESD, Water, Metro Wastewater, Engineering and Capital Projects, Development Services, and Centre City Development Corporation to coordinate and advance GHG reduction efforts. These actions reflect a renewed commitment to enhance San Diego’s leadership role in climate protection.

FACTS/FINDINGS

Fact: AB 32, The Global Warming Solutions Act of 2006, requires that GHG emissions be reduced to 1990 levels by the year 2020, a roughly 25% reduction under business as usual estimates.

Finding #01: Local government has a responsibility to inventory global warming emissions in City operations and in the community at large, set reduction targets, create and implement an action plan.

Fact: The City of San Diego adopted the Sustainable Community Program in 2002 and a Climate Protection Action Plan in 2005.

Fact: The Climate Protection Action Plan lists 22 policies, initiatives and resolutions, recommends annual review and revision of these measures and the development of additional climate protection policies.

Fact: The Conservation Element of the recently adopted General Plan includes a section on Climate Change containing policies that address local GHG mitigation strategies.

Finding #02: Regulations need to be in place in order to implement adopted policies and reduce the City's carbon footprint.

Fact: San Diego has an exceptional knowledge base with three universities and researchers who are among the world's leading climate scientists.

Finding #03: Local policy makers should make better use of the expertise of the researchers and the accumulated scientific information that is available in the San Diego academic community.

RECOMMENDATIONS

The 2007/2008 San Diego County Grand Jury recommends that the Mayor and the City Council of the City of San Diego:

08-69: Review all policies, initiatives and resolutions listed in the Climate Protection Action Plan and strengthen them to include targets, benchmarks and timetables in order to meet the mandate of AB 32.

08-70: Develop an education and outreach program to inform the public, schools, professional associations, business and industry, and other jurisdictions about what they can do to reduce pollution, which may contribute to GHG.

08-71: Develop a formal structure whereby policy makers can interface with academia in order to develop policies that take into account all available options and technologies and that are based in fact.

COMMENDATIONS

The 2007/2008 San Diego County Grand Jury commends the Mayor of the City of San Diego for endorsing The US Mayors Climate Protection Agreement.

The 2007/2008 San Diego County Grand Jury commends the Mayor and the City Council of the City of San Diego for approving the City of San Diego Climate Protection Action Plan and for including Climate Change and Sustainable Development in the recently adopted General Plan.

DISCUSSION #2

Response to Climate Change – City of Chula Vista

The City of Chula Vista has been involved in the Cities for Climate Protection campaign since the early 1990s and was the first city of under 1 million residents to become a founding member of the International Council of Local Environmental Initiatives (ICLEI). As part of this campaign, the City adopted and implemented a Carbon Dioxide Reduction Plan in which it assessed its 1990 GHG emissions and outlined actions to decrease emissions by 20% by 2010.

On May 1, 2007, the City accepted the 2005 GHG Inventory Report and directed staff to reconvene a Climate Change Working Group. The report indicated that, while municipal emissions were down 17%, annual citywide levels had increased 35% since 1990. Measures implemented to reduce emissions from city operations, such as retrofit of traffic and pedestrian signals with energy efficient technology and ongoing replacement of municipal fleets with fuel-efficient and alternative fuel vehicles have proven effective in reducing municipal pollution. The 35% increase citywide is considered primarily due to a 61% increase in population (from 135,136 in 1990 to 217,543 in 2005). This increase represents a significant challenge, but one that the City of Chula Vista has accepted.

On April 1, 2008, the Climate Change Working Group returned to the Chula Vista City Council with its final recommendations on measures to reduce the community's "carbon footprint". The Working Group comprised of residential, business and community group representatives reviewed 90 carbon-reducing measures that were previously implemented by other communities for possible application to Chula Vista. The final recommendations, seven in number, are those that the Working Group considered most likely to reduce GHG emissions over the next few years:

- 1) Require that 100% of the replacement vehicles purchased for the municipal fleet be high efficiency (hybrid) or alternative fuel vehicles.
- 2) Encourage City-contracted fleet operators to adopt the use of high-efficiency (hybrid) or alternative fuel vehicles, by stipulating that 100% of replacement vehicle purchases should be alternative fuel or hybrid vehicles.
- 3) Require City of Chula Vista-licensed businesses to participate in an energy assessment of their physical premises every three years and upon change of ownership.

- 4) Adopt community-wide green building standards that are comprehensive in coverage and mandatory. New and substantially remodeled structures will be required to be built to LEED silver or to an equivalent third party certification green building program, with the effect of having an energy efficiency impact of at least 20% over Title 24.
- 5) Facilitate widespread installation of solar photovoltaic (PV) systems on commercial, residential and municipal facilities by developing and implementing a solar energy conversion program. Proactively enforce existing codes requiring pre-plumbing for solar hot water.
- 6) Facilitate “Smart Growth” around the H Street, E Street and Palomar Street Trolley Stations.
- 7) Coordinate with Otay Water District, San Diego County Water Authority and the Sweetwater Water Authority to convert turf lawns to xeriscape (landscaping that employs drought resistant plants).

The City Council adopted the entire proposal.

FACTS/FINDINGS

Fact: Over a ten-month period, the City of Chula Vista’s Climate Change Working Group reviewed 90 GHG emissions reducing measures being employed by other communities for potential use in Chula Vista.

Finding #04: The Chula Vista City Council unanimously approved an aggressive program for addressing global warming in City operations and in the community.

RECOMMENDATIONS

The 2007/2008 San Diego County Grand Jury recommends that the Mayor and the City Council of the City of Chula Vista:

08-72: Maintain its commitment to reducing GHG emissions by fully implementing the recommendations of the Climate Change Working Group.

COMMENDATION

The 2007/2008 County Grand Jury commends the Mayor and City Council of the City of Chula Vista for exercising courage and leadership in adopting an aggressive sustainable community strategy.

DISCUSSION #3

Response to Climate Change – County of San Diego

San Diego County has adopted a number of “Green Initiatives” including LEED Certified or Silver Standard buildings within its facilities. The Department of Parks and Recreation has two LEED buildings. The Medical Examiner and Forensics Center as well as the Libraries in Fallbrook and Ramona will be built to at least the LEED silver standard, as will all County Operations Center redevelopment projects. The County also has nearly 100 hybrid vehicles in its own fleet with 15 more to be purchased this year.

The County has a Green Building Incentive Program for private developers which offer expedited processing, a 7.5% reduction in plan check and building permit fees and no fees for installation of photovoltaic systems and small wind turbines. Also, the County has reached a 52% waste diversion rate, which brings it into compliance with AB 939, the Integrated Waste Management Act of 1989. This law required that local jurisdictions reduce disposal of waste from the base year of 1990 by 50% by the year 2000 or face potential fines of \$10,000 per day. The County has established goals for energy conservation and development of renewable energy sources, but like City goals, they are expressed in terms of encouraging and working together to achieve, as opposed to targets, timetables and measurable outcomes.

Although not in response to local climate change issues, but of significant importance to habitat protection, the County, several cities within the County and SANDAG began developing a regional Habitat Conservation Plan (HCP) in the early 1990s. It received national recognition as the first region to develop such a plan. The purpose of the program was to preserve key areas of habitat in order to protect endangered species and those that could become endangered without protection while providing certainty and expedited processing for development in appropriate areas. The plan involves land acquisition, land management and monitoring.

All portions of San Diego County will be included in one of four regional habitat conservation plans: 1) the Multiple Species Conservation Plan South (MSCP) approved in 1998; 2) the Multiple Habitat Conservation Program (MHCP) approved by SANDAG in 1993; 3) the North County Multiple Species Conservation Program (MSCP) to be completed in the fall of 2009; and 4) the East County Multiple Species Conservation Program (MSCP) is scheduled to be completed in the Fall of 2010. Without these habitat conservation plans, San Diego, with its high population growth and large number of species requiring protection, was headed for a “train wreck” as described by a former U.S. Secretary of the Interior.

The County is in the process of updating its general plan, but it will not be complete until at least 2010. The County at this point has no Climate Action Plan and no specific program for meeting the requirements of AB 32. The formation of a Climate Action Team is under discussion, but no definitive steps have been taken.

As a comparison, King County, Washington is widely recognized as a leader in developing specific action plans to reduce GHG emissions and to mitigate the impact of global warming. King County is the largest county in the state of Washington, with a population of nearly 2 million, an area of 2,000 square miles and an annual budget of \$4 billion. Scientists at the University of Washington formed an interdisciplinary Climate Impacts Group (CIG) to study the impacts of global climate change on the Pacific Northwest and to work with planners and policy makers to apply this information to the regional decision making process. The process began with development of a study prepared by various deans at the University of Washington studying projections for the quality of life in 2050 if no mitigating actions were taken. The results of that study were the basis for the County's climate action plan.

In September 2007, King County and the CIG, in association with the ICLEI published "Preparing for Climate Change: A Guidebook for Local, Regional and State Governments". This guidebook, with its many specific recommendations, may be an excellent resource for the County Department of Planning and Land Use as it begins preparation of a climate action plan. For example, Chapter 6 "Build Your Climate Change Preparedness Team" recommends a full-scale cross departmental preparedness team including many services, operations and infrastructure such as: water supply, wastewater treatment, public health, environmental protection, planning and zoning, parks and recreation, economic development and emergency services.

Another valuable local resource that will soon be available is the Focus 2050 Study for the San Diego Region, which is scheduled for release in June 2008. This is a study funded by the San Diego Foundation and under the direction of the University of California San Diego Environment and Sustainability Initiative. The study will provide a snapshot of the San Diego region in 2050 if current trends continue. It will focus on eight interrelated areas including:

- Climate change
- Population growth
- Land use and sprawl
- Transportation
- Water
- Energy
- Public health
- Biodiversity and habitat

This analysis will seek ways to reduce GHG emissions and develop and implement adaptation strategies to address the potentially harmful economic, social and ecological consequences of climate change in our region.

FACTS/FINDINGS

Fact: AB 32, The Global Warming Solutions Act of 2006, requires that GHG emissions be reduced to 1990 levels by the year 2020, a 25% reduction.

Finding #05: San Diego County Government has a responsibility to inventory global warming emissions in County operations and in the community at large, set reduction targets and create and implement an action plan.

Finding #06: San Diego County has not yet developed a climate protection action plan.

Fact: There are valuable tools available, such as the King County Guidebook for Local, Regional and State Governments, on preparing a climate protection action plan.

Finding #07: San Diego County needs a climate action plan in order to comply with State legislation and to begin the process of stabilizing and reducing GHG emissions.

RECOMMENDATIONS

The 2007/2008 San Diego County Grand Jury recommends that the San Diego County Board of Supervisors:

08-73: Review all policies, initiatives and resolutions related to climate protection strengthening them as needed to include targets, benchmarks and timetables in order to meet the mandate of AB 32.

08-74: Develop an education and outreach program to inform the public, schools, professional associations, business and industry, and other jurisdictions about what they can do to reduce pollution that may cause global warming.

08-75: Develop a formal structure whereby policy makers can interface with academia in order to develop policies that will promote sustainability and that are science based.

DISCUSSION #4

Response to Climate Change – SANDAG

The Board of Directors of the San Diego Association of Governments (SANDAG) is comprised of representatives of the 18 cities and county government. They provide a forum for regional decision-making. The role of SANDAG is to develop strategic plans, build consensus, obtain and allocate funds and provide information on a wide range of topics related to the region's quality of life. Chief among SANDAG's responsibilities are adopting and implementing a Regional Comprehensive Plan (RCP) and a Regional Transportation Plan (RTP). The RCP, which was adopted in 2004, is the strategic planning blueprint for the region. It did not take climate change into account in the 2004 update. The revised RTP was adopted in November 2007 despite objection from the Attorney General's office. Since the transportation sector accounts for 38 - 40% of all

GHG emissions, decisions on regional transportation and the impact of increasing growth in vehicle miles traveled (VMT) are of critical importance.

Following passage of AB 32, the Office of the Attorney General has commented on the environmental impact reports (EIRs) on major planning documents for jurisdictions throughout the state (such as the City of San Diego General Plan discussed earlier). The Attorney General's office filed a lawsuit against the County of San Bernardino because the EIR did not adequately analyze the General Plan's impacts on climate change and did not propose mitigation measures for climate change impacts.

The Attorney General's letter to SANDAG regarding the RTP commended SANDAG for including a policy to adopt a regional Climate Action Plan, but expressed a number of concerns. The RTP embraces the Smart Growth Concept, which means compact and transit accessible employment, accessible, pedestrian oriented mixed-use development patterns and land re-use. However, the RTP Smart Growth Concept Map shows 193 widely dispersed urban and rural "smart growth" areas. Many of these areas are far from employment opportunities or access to transit. Designation on the Smart Growth Concept Map makes a site eligible for infrastructure development incentives. The Attorney General's letter questioned the large number of smart growth sites suggesting that the RTP smart growth map seems to be "focused on developable land rather than access to transit or employment." The letter also criticized the RTP for favoring freeway expansion over expanding public transit, biking and walking recommended by an Independent Transit Review.

A White Paper on Climate Change Planning Issues presented at the January 25, 2008 SANDAG board meeting acknowledges that SANDAG has jurisdiction over activities that contribute to climate change and recognizes a responsibility to reduce GHG emissions. The report states that currently the California Environmental Quality Act (CEQA) guidelines do not provide direction on evaluating climate change impacts, which creates some level of uncertainty. The California Air Resources Board (CARB) is the state agency responsible for monitoring and regulating sources of GHG emissions. The timeline for implementation of AB 32 shows preparation and approval of a scoping plan to occur by January 1, 2009 with regulations based on the scoping plan to become effective January 1, 2012. There is currently, however, a detailed fact sheet from the Attorney General's office, which describes climate change mitigation best practices and there are many letters to various jurisdictions, including SANDAG, that have numerous mitigation suggestions. Many cities, including San Diego and Chula Vista have moved forward using ICLEI protocol to establish GHG emission 1990 levels and targets without waiting for the final word from CARB.

In September 2002, a California law known as the Renewable Portfolio Standard (RPS) requiring utility companies in California to obtain at least 20% of their electricity from renewable resources was passed. The original law set a deadline of 2017. In September 2006 the California legislature passed SB 107, which accelerated this requirement so that it must be met by 2010. The Governor has endorsed this accelerated schedule and has set a goal of achieving a 33-percent renewable energy share by 2020 for the state as a whole.

SANDAG's Energy Working Group has been assisting with the local utility companies to assist and encourage compliance with the renewable energy deadline. Unfortunately, the local utility announced in October 2007 that it is unlikely to meet the state's renewable energy goals. The other two large utility companies in the state have two and three times the amount of renewable energy sales, respectively, and both companies appear to be on track to meet the renewable energy deadline. One of these companies has launched the nation's largest solar cell installation, a project "that will place 250 megawatts of advanced photovoltaic generating technology on 65 million square feet of roofs of Southern California commercial buildings – enough power to serve approximately 162,000 homes." According to the weather service, which monitors 265 weather stations nationwide, California is the second sunniest state. Arizona is number one.

The California Public Utilities Commission (CPUC) issued a draft final report entitled "Achieving a 33 Percent Renewable Energy Target". The authors of the report concluded that it is economically and technically feasible to achieve a 33% RPS in California by 2020 and moreover, this may result in a net savings to California's electricity customers over a twenty year period.

FACTS/FINDINGS

Fact: AB 32, The Global Warming Solutions Act of 2006, requires that GHG emissions be reduced to 1990 levels by the year 2020, a 25% reduction.

Finding #08: Local government has a responsibility to inventory GHG emissions in its operations and in the community, set reduction targets, and to create and implement an action plan.

Fact: SANDAG does not have a climate protection action plan in place.

Finding #09: As the regional governing body charged with transportation planning, the major source of GHG emissions, SANDAG has a special obligation to be the leader in developing and implementing an effective climate protection action plan.

Fact: Two of the major utility companies in California are on track for meeting the state requirement of obtaining 20% of electricity from renewable sources.

Fact: The local utility company has announced that it will not be able to meet the state mandate.

Finding #10: SANDAG has a responsibility to use its influence to encourage the local utility to match the commitment of other California utility companies to develop renewable energy resources.

Fact: California is second only to Arizona in percentage of sunshine.

Finding #11: This region has a renewable source of energy that is not being sufficiently utilized.

RECOMMENDATIONS

The 2007/2008 San Diego County Grand Jury recommends that the SANDAG Board of Directors:

- 08-76:** Develop a climate protection action plan with specific policies and procedures including targets and timetables which will enable the region to comply with the mandate of AB 32.
- 08-77:** Work closely with the utility companies to encourage actions that will promote quality of life and sustainability.

COMPLETE RECOMMENDATIONS

The 2007/2008 San Diego County Grand Jury recommends that the Mayor and the City Council of the City of San Diego:

- 08-69:** Review all policies, initiatives and resolutions listed in the Climate Protection Action Plan and strengthen them to include targets, benchmarks and timetables in order to meet the mandate of AB 32.
- 08-70:** Develop an education and outreach program to inform the public, schools, professional associations, business and industry, and other jurisdictions about what they can do to reduce pollution, which may contribute to GHG.
- 08-71:** Develop a formal structure whereby policy makers can interface with academia in order to develop policies that take into account all available options and technologies and that are based in fact.

The 2007/2008 San Diego County Grand Jury recommends that the Mayor and the City Council of the City of Chula Vista:

- 08-72:** Maintain its commitment to reducing GHG emissions by fully implementing the recommendations of the Climate Change Working Group.

The 2007/2008 San Diego County Grand Jury recommends that the San Diego County Board of Supervisors:

- 08-73:** Review all policies, initiatives and resolutions related to climate protection strengthening them as needed to include targets, benchmarks and timetables in order to meet the mandate of AB 32.

08-74: Develop an education and outreach program to inform the public, schools, professional associations, business and industry, and other jurisdictions about what they can do to reduce pollution that may cause global warming.

08-75: Develop a formal structure whereby policy makers can interface with academia in order to develop policies that will promote sustainability and that are science based.

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08-76: Develop a climate protection action plan with specific policies and procedures including targets and timetables which will enable the region to comply with the mandate of AB 32.

08-77: Work closely with the utility companies to encourage actions that will promote quality of life and sustainability.

REQUIREMENTS AND INSTRUCTIONS

The California Penal Code §933(c) requires any public agency which the Grand Jury has reviewed, and about which it has issued a final report, to comment to the Presiding Judge of the Superior Court on the findings and recommendations pertaining to matters under the control of the agency. Such comment shall be made *no later than 90 days* after the Grand Jury publishes its report (filed with the Clerk of the Court); except that in the case of a report containing findings and recommendations pertaining to a department or agency headed by an elected County official (e.g. District Attorney, Sheriff, etc.), such comment shall be made *within 60 days* to the Presiding Judge with an information copy sent to the Board of Supervisors. Furthermore, California Penal Code §933.05(a), (b), (c), details, as follows, the manner in which such comment(s) are to be made:

- (a) As to each grand jury finding, the responding person or entity shall indicate one of the following:
 - (1) The respondent agrees with the finding
 - (2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.
- (b) As to each grand jury recommendation, the responding person or entity shall report one of the following actions:
 - (1) The recommendation has been implemented, with a summary regarding the implemented action.
 - (2) The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.

- (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of publication of the grand jury report.
- (4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.
- (c) If a finding or recommendation of the grand jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the Board of Supervisors shall respond if requested by the grand jury, but the response of the Board of Supervisors shall address only those budgetary or personnel matters over which it has some decision making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.

Comments to the Presiding Judge of the Superior Court in compliance with the Penal Code §933.05 are required from the:

<u>Responding Agency</u>	<u>Recommendations</u>	<u>Date</u>
Mayor, City of San Diego	08-69, 08-70, 08-71	8/21/08
City Council, City of San Diego	08-69, 08-70, 08-71	8/21/08
Mayor, City of Chula Vista	08-72	8/21/08
City Council, City of Chula Vista	08-72	8/21/08
San Diego County Board of Supervisors	08-73, 08-74, 08-75	8/21/08
SANDAG Board of Directors	08-76, 08-77	8/21/08

LIST OF ACRONYMS AND ABBREVIATIONS

AB 32 — (Calif. State Assembly Bill) Global Warming Solutions Act of 2006

AB 939 — Integrated Waste Management Act

SB 107 — (Calif. State Senate Bill) Renewable Energy

SB 375 — Transportation, Land Use and the California Environmental Quality Act

CARB — California Air Resources Board

CCP — Cities for Climate Protection

CEQA — California Environmental Quality Act

CIG — Climate Impacts Group

CPUC — California Public Utilities Commission

ESD — Environmental Services Department

GHG — Green House Gas

HCP — Habitat Conservation Plan

ICLEI — International Council of Local Environmental Initiatives

IPCC — Inter-governmental Panel on Climate Change

LEED — Leadership in Energy and Environmental Design

MHCP — Multiple Habitat Conservation Program

MSCP — Multiple Species Conservation Program

RCP — Regional Comprehensive Plan

RPS — Renewable Portfolio Standard

RTP — Regional Transportation Plan

SANDAG — San Diego Association of Governments

VMT — Vehicle Miles Traveled

APPENDIX A

REDUCE GREENHOUSE GAS EMISSIONS IN SAN DIEGO COUNTY

10 SIMPLE STEPS TO HELP SLOW GLOBAL WARMING

While government, business, and technology can help forge the path to a clean-energy future, individuals must also act. Personal choices can make a difference. Below are 10 things you can do. If all San Diegans took the steps listed below, we could reduce our carbon dioxide emissions by nearly nine million tons!

1. Turn off unnecessary lights and unplug un-used electronic devices. You can save hundreds of pounds of carbon dioxide per year.
2. Buy energy-efficient light bulbs. Replace three frequently used light bulbs with compact fluorescent bulbs and save 300 lbs of carbon dioxide per year.
3. Drive less. Cars account for more than 40% of our regions greenhouse gas emissions. Leaving your car at home just two days a week will reduce your carbon dioxide emissions by 1,590 pounds per year.
4. Conserve water. Because transporting and treating water requires about 10% of California's energy annually, using water more efficiently also means using less energy. You can save hundreds of pounds of carbon dioxide just by using water wisely.
5. Plant more shade trees. Over its lifetime, a typical tree in our region absorbs 780 pounds of carbon dioxide.
6. Recycle paper, glass, and metal. By recycling half the waste you generate at home and using recycled products, you can keep 2,400 pounds of carbon dioxide out of the atmosphere each year.

7. Use more energy from renewable sources. The San Diego Regional Energy Office will launch an energy rebate program in January 2007, with tens of millions of dollars available annually for rebates to consumers who install solar-power or wind-power sources.
8. Wash your clothes in cold water. About 90% of the energy used to wash your clothes is used to heat the water! There are now new detergents specially designed for cold-water washing. So revisit your laundry aisle and switch to Cold Wash/Cold Rinse. You will keep 500 pounds of carbon dioxide out of the atmosphere each year.
9. Line-dry your clothes. There is no shortage of sunshine in San Diego, and you won't generate any carbon dioxide.
10. Encourage your friends and local, state, and federal government representatives to take the steps necessary to curb global warming.

Sources: San Diego Regional Energy Office

City of San Diego Climate Protection Action Plan, July 2005.

APPENDIX B



2005 ADOPTED RESOLUTIONS

ENVIRONMENT

ENDORISING THE U.S. MAYORS CLIMATE PROTECTION AGREEMENT

WHEREAS, the U.S. Conference of Mayors has previously adopted strong policy resolutions calling for cities, communities and the federal government to take actions to reduce global warming pollution; and

WHEREAS, the Inter-Governmental Panel on Climate Change (IPCC), the international community's most respected assemblage of scientists, has found that climate disruption is a reality and that human activities are largely responsible for increasing concentrations of global warming pollution; and

WHEREAS, recent, well-documented impacts of climate disruption include average global sea level increases of four to eight inches during the 20th century; a 40 percent decline in Arctic sea-ice thickness; and nine of the ten hottest years on record occurring in the past decade; and

WHEREAS, climate disruption of the magnitude now predicted by the scientific community will cause extremely costly disruption of human and natural systems throughout the world including: increased risk of floods or droughts; sealevel rises that interact with coastal storms to erode beaches, inundate land, and

damage structures; more frequent and extreme heat waves; more frequent and greater concentrations of smog; and

WHEREAS, on February 16, 2005, the Kyoto Protocol, an international agreement to address climate disruption, went into effect in the 141 countries that have ratified it to date; 38 of those countries are now legally required to reduce greenhouse gas emissions on average 5.2 percent below 1990 levels by 2012; and

WHEREAS, the United States of America, with less than five percent of the world's population, is responsible for producing approximately 25 percent of the world's global warming pollutants; and

WHEREAS, the Kyoto Protocol emissions reduction target for the U.S. would have been 7 percent below 1990 levels by 2012; and

WHEREAS, many leading US companies that have adopted greenhouse gas reduction programs to demonstrate corporate social responsibility have also publicly expressed preference for the US to adopt precise and mandatory emissions targets and timetables as a means by which to remain competitive in the international marketplace, to mitigate financial risk and to promote sound investment decisions; and

WHEREAS, state and local governments throughout the United States are adopting emission reduction targets and programs and that this leadership is bipartisan, coming from Republican and Democratic governors and mayors alike; and

WHEREAS, many cities throughout the nation, both large and small, are reducing global warming pollutants through programs that provide economic and quality of life benefits such as reduced energy bills, green space preservation, air quality improvements, reduced traffic congestion, improved transportation

choices, and economic development and job creation through energy conservation and new energy technologies; and

WHEREAS, mayors from around the nation have signed the U.S. Mayors Climate Protection Agreement which, as amended at the 73rd Annual U.S. Conference of Mayors meeting, reads: The U.S. Mayors Climate Protection Agreement D. We urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to 7 percent below 1990 levels by 2012, including efforts to: reduce the United States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels; E. We urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that includes 1) clear timetables and emissions limits and 2) a flexible, market-based system of tradable allowances among emitting industries; and F. We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as: 1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan. 2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities; 3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit; 4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology; 5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money; 6. Purchase only Energy Star equipment and appliances for City use; 7. Practice and promote sustainable building practices using the U.S. Green Building

Council's LEED program or a similar system; 8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel; 9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production; 10. Increase recycling rates in City operations and in the community; 11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO₂; and 12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.

NOW, THEREFORE, BE IT RESOLVED that The U.S. Conference of Mayors endorses the U.S. Mayors Climate Protection Agreement as amended by the 73rd annual U.S. Conference of Mayors meeting and urges mayors from around the nation to join this effort.

BE IT FURTHER RESOLVED, The U.S. Conference of Mayors will work in conjunction with ICLEI Local Governments for Sustainability and other appropriate organizations to track progress and implementation of the U.S. Mayors Climate Protection Agreement as amended by the 73rd annual U.S. Conference of Mayors meeting.

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