

**HUMBOLDT COUNTY PLANNING COMMISSION
GENERAL PLAN UPDATE**

MEETING OF SEPTEMBER 15, 2011

Recommended Commission Agenda

At the September 8th meeting, the Commission continued the review and straw voting for Chapter 11, the Water Resources Element, and initiated review of Chapter 12, the Energy Element. For tonight's meeting staff recommends that the Commission:

1. Review Chapter 12, Energy Element.
2. Allow time for public comments.
3. As time may allow, review outstanding issues of Chapter 11, Water Resources.
4. Continue the hearing to September 22nd, or other suitable date.

Chapter 12 Energy Element

At the September 8th meeting, the Commission initiated review of Chapter 12, the Energy Element, and directed staff to review the public comments and alternative charts submitted, and return with possible revisions.

E-P6. Comprehensive Action Plan for Energy. Staff recommends this policy be deleted as it is largely duplicative of E-P5 and E-IM2:

~~**E-P6. Comprehensive Action Plan for Energy.** The County shall assist in the implementation and align its energy strategy with the Redwood Coast Energy Authority (RCEA) Comprehensive Action Plan for Energy, as amended.~~

E-P7. County Energy Consumption. Based on comments received, staff recommends the following clarifying revision:

E-P7 County Government Energy Consumption. The County government shall reduce ...
[continue as in the original draft].

E-P8. County Building Design Standards. Based on comments received, staff recommends the following revision:

E-P8. County Building Design Standards. Design, construct and operate all new and renovated County-owned facilities to U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) "Silver" or better energy efficiency standards consistent with State Executive Order S-20-04, or to similar California Green Building Standards.

E-P11. Energy-efficient Landscape Design. Based on comments received, add an Alternative B version of this policy:

~~**E-P11. Energy-efficient Landscape Design.** Require Encourage cost-effective energy-efficient landscape design in development projects, subdivisions, and in new and existing streets and parking areas in order to reduce impervious surfaces, minimize heat and glare, control soil erosion, conserve water, and promote pedestrian safety and vehicular traffic calming~~

measures.

E-P13. Water Efficiency. Based on comments received, add an Alternative B version of this policy:

E-P13. Water Efficiency. Promote the efficient use of water in residences, businesses, industries, and agriculture by requiring water-saving plumbing and landscaping devices in new developments, or plumbing-related remodels, ~~or upon change of ownership.~~

E-IM2. Comprehensive Action Plan for Energy. Based on comments received, staff recommends the following revision:

E-IM2. Comprehensive Action Plan for Energy. ~~Seek funding and s~~Support efforts to implement the Redwood Coast Energy Authority (RCEA) Comprehensive Action Plan for Energy.

Chapter 15 Air Quality Element

Following review of the Energy Element, the next section up for Commission review is Chapter 15, Air Quality. Staff originally prepared this chart in 2010 and after an initial review, identified policy language that needed updating. The recommended revisions to the Plan Alternatives Comparison Chart are attached as Attachment 1 with proposed changes highlighted in yellow (the “narrative” section of this chapter is provided as Attachment 2). Staff is requesting that the Commission provide their identified “short list” (see Attachment 3 for details on review guidelines) to staff prior to the meeting of September 15th.

Please Note: Additional copies of any previously-distributed Key Issues and Plan Alternatives Chart or support materials for the Air Quality and/or Energy Elements are available by contacting Tom Hofweber (268-3738) or Martha Spencer (268-3704), or are available on the GPU website at www.planupdate.org.

Attachment 1: Chapter 15, Air Quality, Key Issues and Plan Alternatives Comparison Chart

Attachment 2: Chapter 15, Air Quality “narrative” section of the Plan

Attachment 3: Planning Commission GPU Plan Alternatives Review Guide

Attachment 1

**Chapter 15, Air Quality
Key Issues and
Plan Alternatives Comparison Chart**

Summary of Key Issues and Review of Alternatives

Chapter 15 Air Quality Element

This Element seeks to improve air quality in the County and reduce greenhouse gas emissions.

Chapter 15 Air Quality Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
<p>Overall Air Quality The county meets all federal standards for air quality and all state standards except for one pollutant—airborne particles that are 10 microns in diameter and smaller (PM₁₀), which are from a variety of sources.</p> <p>Should the County actively seek to reduce PM₁₀ emissions?</p> <p>What policies, standards and implementation measures are most effective at reducing PM₁₀ emissions?</p> <p>More attention is being paid to air quality impacts from mining rock containing asbestos.</p> <p>Should the County adopt requirements to minimize air quality impacts from mining rock containing asbestos?</p>	<p>The proposed Plan seeks to reduce PM₁₀ emissions throughout the County by reducing the length and frequency of automobile trips (AQ-P1), coordinating with the North Coast Unified Air Quality Management District (NCUAQMD) in the review of projects that may have significant PM₁₀ emissions impacts (AQ-P4, P5, P-7, S1, S2, IM1, IM2), and supporting incentives to minimize PM₁₀ emissions from woodstoves and fireplaces (AQ-P3), and requiring a fugitive dust control plan for projects that involve grading of two (2) acres or more (AQ-S1).</p>	<p>The Framework General Plan had a policy to evaluate new commercial and industrial sources of emissions using analytical methods and significance criteria approved by the District. There was also reference to a possible future limit on wood burning fireplaces.</p>	<p>Alternative A requires fugitive dust control plans for projects with one (1) acre of disturbance.</p> <p>Alternative A includes an implementation measure to apply a Mineral Resources zone overlay to existing rock quarries mining and transporting rock containing asbestos. The standards will protect residential uses near the mining operations and along the haul routes from air quality impacts</p>	<p>Alternative C would control PM₁₀ emissions through the referral of projects requiring environmental review to the NCUAQMD for recommendations. Fugitive dust control measures would be consistent with those required by the NCUAQMD.</p>

Chapter 15 Air Quality Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
<p>Climate Change and Greenhouse Gas (GHG) Emission Reductions. The state is requiring reductions in GHG emissions from local government actions. These actions include reducing energy use, waste, water use, transportation emissions, and improving energy efficiency in new development through siting and design considerations.</p> <p>Should the County take a leadership role to develop and implement a multi-jurisdictional Climate Action Plan to achieve reductions in greenhouse gas emissions?</p> <p>What GHG reduction measures should be included in the Climate Action Plan?</p> <p>Should the County implement measures to sequester carbon on forest and agricultural lands?</p>	<p>The proposed Plan would put the County in a leadership role in reducing GHG emissions. A centerpiece of the new Element is adoption of a Climate Action Plan (AQ-P9). Policy AQ-P10 proposes the County will reduce its 2020 GHG emissions from governmental operations to less than 2003 levels. Other proposed policies will increase solar-electric capacity of new development (AQ-P12), increase energy efficiency of new buildings (AQ-P13), and better accommodating electric vehicles (AQ-P14).</p> <p>The Element recognizes that increasing carbon storage on timber and agricultural lands may be the County's most effective means to combat global warming. Policy AQ-P11 would have the County provide incentives for increased carbon sequestration on forest lands and encourage the use of forest biomass for sustainable energy generation.</p>	<p>The existing plan does not contain any policies, standards or programs addressing climate change or GHG emissions. There are policies in the Housing Element encouraging energy efficient siting and construction techniques.</p>	<p>Alternative A takes the policies, standards and implementation measures of Alternative B a step further in reducing GHG emissions by evaluating the impacts of new large scale residential, commercial and industrial projects, and requiring feasible mitigation. Alternative A would also establish a voluntary Transfer of Development Rights program to reduce GHG emissions from new rural development by relocating it into areas with public water and sewer.</p>	

Plan Alternatives Comparison Chart

Chapter 15 Air Quality Element **updated 9-14-11**

NOTE: changes from draft document are highlighted in yellow with corresponding staff comments.

Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
				5.4 Goals		
A	B			AQ-G1. Improved Air Quality. Air quality that exceeds minimum state and federal ambient air quality standards.	No specific goals in existing plan.	
				COMMENTS:		
		C		AQ-G1. Improved Air Quality. Air quality that exceeds <u>meets</u> minimum state and federal ambient air quality standards.	Minimize role in air quality management among existing and proposed sources.	
				COMMENTS:		
A	B	C		AQ-G2. Particulate Emissions. Successful attainment of California Ambient Air Quality Standards for particulate matter fewer than 10 microns (PM ₁₀).		
				COMMENTS:		

Plan Alternative			Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
A	B	C	AQ-G3. Greenhouse Gas Emissions. Successful mitigation of greenhouse gas emissions associated with this Plan to levels of non-significance as established by the Global Warming Solutions Act and subsequent implementing legislation and regulations.		
			COMMENTS:		
			15.4 Policies		
A	B		AQ-P1. Reduce Length and Frequency of Vehicle Trips. Reduce the length and frequency of vehicle trips through land use and transportation policies by encouraging mixed-use development, compact development patterns in areas served by public transit, and alternative modes of travel.	Leg, QJ, AQ-IM1, AQ-IM3-5, C-P1, C-P2, C-P22-37, C-S7-9, C-IM7-8, C-IM11-12,   	
			COMMENTS:		
A	B		AQ-P2. Reduce Localized Concentrated Air Pollution. Reduce or minimize the creation of "hot spots" or localized places of concentrated automobile emissions.	Leg, QJ, AQ-P7	
			COMMENTS:		
	B		AQ-P3. Fireplace and Woodstove PM₁₀ Emissions. Support incentives to minimize PM ₁₀ emissions from fireplaces and woodstoves.		
			COMMENTS:		

Plan Alternative			Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
A			AQ-P3. Fireplace and Woodstove PM₁₀ Emissions. Support incentives to Minimize PM ₁₀ emissions from fireplaces and woodstoves.		
			COMMENTS:		
A	B	C	AQ-P4. Construction and Grading Dust Control. Dust control practices on construction and grading sites shall achieve compliance with NCAQMD fugitive dust emission standards.	QJ, Min, AQ-S1 	
			COMMENTS:		
A	B	C	AQ-P5. Air Quality Impacts from New Development. During environmental review of discretionary permits, reduce emissions of air pollutants from new commercial and industrial development by requiring feasible mitigation measures to achieve the standards of the NCAQMD.	QJ, AQ-S2 	
			COMMENTS:		
A	B		AQ-P6. Buffering Land Uses. During environmental review of discretionary commercial and industrial projects, consider the use of buffers between new sources of emissions and adjacent land uses to minimize exposure to air pollution.	QJ, AQ-S3 	
			COMMENTS:		
A	B	C	AQ-P7. Interagency Coordination. Coordinate with the NCAQMD early in the permit review process to identify expected regulatory outcomes and minimize delays for projects involving: A. CEQA environmental review; B. Building demolition projects that may involve removal of asbestos	QJ, Min, AQ-S2 	

Plan Alternative			Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
			<p>containing material subject to National Emission Standards for Hazardous Air Pollutants (NESHAP); and</p> <p>C. Grading and mining operations subject to State Airborne Toxic Control Measures (ATCM) for naturally occurring asbestos.</p> <p>Rely on the air quality standards, permitting processes, and enforcement capacity of the NCAQMD to define thresholds of significance and set adequate mitigations under CEQA to the maximum extent allowable.</p>		
			COMMENTS:		
A	B	C	<p>AQ-P8. Reduce Air Quality Impacts from Wildfires. Support and encourage fire suppression of wildfires that may have an acute air quality health impact on local population centers.</p>	<p>Pol, AQ-IM6</p> 	
			COMMENTS:		
A	B		<p>AQ-P9. County Climate Action Plan. Working through the Redwood Coast Energy Authority (RCEA) and this Plan, develop and implement a multi-jurisdictional Climate Action Plan to achieve reductions in greenhouse gas emissions consistent with the state Global Warming Solutions Act and subsequent implementing legislation and regulations (current goal set at a 10% reduction in 2003 greenhouse gas emissions by the year 2020).</p>	<p>Prog, AQ-S4, AQ-IM3-5</p>   <p>Amended for clarity and current situation.</p>	
			COMMENTS:		
A	B		<p>AQ-P10. County Government Greenhouse Gas Emission Reductions. To lead by example, the County of Humboldt shall reduce its 2003 greenhouse gas emissions from governmental operations consistent with the state Global Warming Solutions Act and subsequent implementing legislation and regulations (current goal set at a 10% reduction in 2003 greenhouse gas emissions by the year 2020).</p>	<p>Prog, AQ-S4, AQ-IM3-5</p>   <p>Amended for clarity and current law.</p>	

Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
				COMMENTS:		
A				AQ-Px. Review of Projects for Greenhouse Gas Emission Reductions. The County shall evaluate the GHG emissions of new large scale residential, commercial and industrial projects, and require feasible mitigation measures to minimize GHG emissions.		
				COMMENTS:		
A				AQ-Px. Transfer of Development Rights. The County shall encourage the transfer of development rights from resource lands and other rural areas into areas served with public water and sewer to reduce GHG emissions from new development.		
				COMMENTS:		
A	B			AQ-P11. Forest Sequestration and Biomass Energy. Provide incentives for increased carbon sequestration on forest lands and encourage the reduction of smoke production through the utilization-use of excess forest biomass for sustainable energy generation and other uses.	Pol, Prog, AQ-S4 AQ-IM3-5   Change recommended by members of the FSC	
				COMMENTS:		
A	B			AQ-P12. Solar Electric System Capacity. Encourage and provide incentives to increase solar-electric capacity in residential, commercial, and industrial sectors.	Pol, Prog, AQ-IM3-5  	

Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
				COMMENTS:		
A	B			AQ-P13. Energy Efficient Building Design. Encourage and provide incentives for construction of LEED (Leadership in Energy and Environmental Design) certified (or equivalent) buildings and energy saving measures beyond Title 24 requirements for residential and commercial projects.	Pol, Prog, AQ-IM3-5   State now has voluntary tiers beyond Title 24 similar to LEED	
				COMMENTS:		
A	B			AQ-P14. Electric Vehicle Accommodations. Encourage and provide incentives for commercial and residential design that supports the charging of electric vehicles.	Pol, Prog, AQ-IM3-5  	
				COMMENTS:		
A	B			AQ-P15. Preservation and Replacement of On-site Trees. Projects requiring discretionary review should preserve large trees where possible and mitigate for carbon storage losses attributable to significant removal of trees.	QJ, AQ-S4 AQ-IM3-5  	
				COMMENTS:		
				15.5 Standards		
	B			AQ-S1. Construction and Grading Dust Control. Ground disturbing construction and grading shall employ fugitive dust control strategies to prevent visible emissions from exceeding NCAQMD opacity regulations and prevent public nuisance. Projects requiring discretionary review that result in ground disturbance exceeding two acres at any one time shall prepare a		

Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
				fugitive dust control plan.		
				COMMENTS:		
A				AQ-S1. Construction and Grading Dust Control. Ground disturbing construction and grading shall employ fugitive dust control strategies to prevent visible emissions from exceeding NCAQMD opacity regulations and prevent public nuisance. Projects requiring discretionary review that result in ground disturbance exceeding two acres <u>one acre</u> at any one time shall prepare a fugitive dust control plan.		
				COMMENTS:		
		C		AQ-S1. Construction and Grading Dust Control. Ground disturbing construction and grading shall employ fugitive dust control strategies to prevent visible emissions from exceeding NCAQMD opacity regulations and prevent public nuisance. Projects requiring discretionary review that result in ground disturbance exceeding two acres at any one time shall prepare a fugitive dust control plan.		
				COMMENTS:		
A	B	C		AQ-S2. Evaluate Air Quality Impacts. During environmental review of discretionary projects, evaluate new commercial and industrial sources of emissions using analytical methods and significance criteria used or recommended by the NCAQMD.		
				COMMENTS:		

Plan Alternative		Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
A		AQ-Sx. Evaluate Greenhouse Gas Emission Impacts. During environmental review of large scale residential, commercial and industrial projects, include an assessment of the project’s GHG emissions, and require feasible mitigation consistent with best practices documented by the California Air Pollution Control Officers Association in their 2008 white paper “CEQA & Climate Change”.		
		COMMENTS:		
A	B	AQ-S3. Buffering Land Uses. When considering buffers between new commercial and industrial sources of emissions and adjacent land uses follow the California Air Resources Board’s <i>Air Quality and Land Use Handbook: A Community Health Perspective</i> and NCAQMD recommendations.		
		COMMENTS:		
A	B	AQ-S4. Preservation and Replacement of On-site Trees. Discretionary review projects which remove more than 50 trees of greater than 38 inch circumference measured at 4.5 feet height shall re-plant replacement trees on-site or provide offsetting carbon mitigations.		
		COMMENTS:		
		15.6 Implementation Measures		
A	B	AQ-IM1. Review Future Monitoring Results. Review local PM ₁₀ emissions monitoring results from the California Air Resources Board to guide future General Plan Housing Element updates, and implement new land use and transportation policies and other regulatory controls to meet state and federal PM ₁₀ emissions standards.		

Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
				COMMENTS:		
A	B	C		AQ-IM2. North Coast Air Quality Management Permitting Coordination. The County shall maintain efficient and timely procedures for project referral to the North Coast Air Quality Management District for review and consultation.		
				COMMENTS:		
A	B			AQ-IM3. County-wide Climate Action Plan. Through its association with the RCEA, The County shall participate in the development and implementation of a multi-jurisdictional develop and implement a Climate Action Plan that effectively mitigates the carbon emissions attributable to this Plan, consistent with the requirements of the state Global Warming Solutions Act and subsequent implementing legislation and regulations (currently set at a 10% reduction in 2003 greenhouse gas emissions by the year 2020).	See also AQ-IM5 Revised to reflect current approach and legal framework.	
				COMMENTS:		
A	B			AQ-IM4. County Government Greenhouse Gas Emission Reductions. The County shall prepare a Climate Action Plan for its governmental operations consistent with the Countywide Climate Action Plan that seeks emission reductions in the following areas: <ul style="list-style-type: none"> A. Energy Efficiency and Conservation B. Green Building C. Waste Reduction and Recycling D. Climate-Friendly Purchasing E. Renewable Energy and Low-Carbon Fuels F. Efficient Transportation G. Offsetting Carbon Emissions H. Promoting Community and Individual Action 		

Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
A	B			AQ-IM5. Greenhouse Gas Emissions. Update the General Plan and Land Use Ordinances as appropriate to reflect the adopted countywide Climate Action Plan and new state laws and regulations for greenhouse gas emissions when they become available.		
				COMMENTS:		
A				AQ-IMx. Review of Greenhouse Gas Emissions Impacts of New Development. Modify the Zoning and Subdivision Ordinances to assess GHG emissions of large scale residential, commercial and industrial projects, and require feasible mitigation.		
A				AQ-IMx. Transfer of Development Rights Program. The County shall develop a voluntary transfer of development rights program which provides incentives to transfer entitlements from resource lands and other rural areas into areas served with public water and sewer to reduce GHG emissions from new development.		
				COMMENTS:		
A	B			AQ-IM6. Programs to Reduce Air Quality Impacts of Wildland Fires. Support and encourage programs such as fuel reduction, prescribed fires, and vegetation management as recommended in the County’s Fire Plan to reduce air quality impacts of wildfires.		
				COMMENTS:		
A				AQ-IMx. Reduce Air Quality Impacts from Surface Mining of Rock Containing Asbestos. Apply a Mineral Resources zone overlay to existing rock quarries which protects residential uses nearby and along the haul route from air quality impacts		

Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
				of mining and transporting rock containing asbestos.		
				COMMENTS:		

Attachment 2
Chapter 15, Air Quality Element Narrative

Chapter 15. Air Quality Element

15.1 Purpose

The purpose of this Element is to describe the county's existing air quality, sources of air pollution, and strategies for improving air quality. Policies to reduce greenhouse gas emissions and mitigate climate change are included in this Element.

15.2 Relationship to Other Elements

Air quality considerations, including greenhouse gas emissions, are reflected in policies within the Land Use, Circulation, Energy, and Safety elements and in the Mineral Resources Chapter of the Conservation and Open Space elements.

15.3 Background

Air Quality Standards and Sources of Emissions

As a whole, air quality in this county is better than other parts of the state. Local measurements by the North Coast Unified Air Quality Management District (NCAQMD) reveal that the county meets all federal standards for air quality and all state standards except for one pollutant—airborne particles that are 10 microns in diameter and smaller (PM₁₀).

Emissions of PM₁₀ come from a number of sources within Humboldt County:

- o Stationary sources such as power plants, the pulp mill, and manufacturing facilities. These sources are not the most significant PM₁₀ contributors locally.
- o Area-wide sources in which emissions originate from many points over a wide area. These include emissions from, fireplaces, construction and demolition, road dust, and farming operations. Wood stove emissions are a significant source of PM₁₀ emissions during the winter months when the county exceeds PM₁₀ thresholds. Road dust is a significant source during dry months.
- o Mobile sources including "on-road sources" such as automobiles, and "off-road sources," such as farm and construction equipment. Automobiles are significant sources of PM₁₀ locally.
- o Natural sources include wildfires, sea salts, windblown dust, and biogenic emissions from plants and trees. Along the coast, sea salts are a significant source of PM₁₀.

The emissions from stationary sources are subject to General Plan policies if the project requires discretionary land use permits. Environmental review of new development requires coordination between NCAQMD and the County to ensure project conditions are consistent with state air quality laws and reduce impacts below levels of significance.

There is also direct coordination with NCAQMD on the demolition of commercial structures that may involve asbestos and on surface mining and grading that occurs in areas containing naturally occurring asbestos. This Plan supports complimentary policies and frequent communication between the County and the NCAQMD to coordinate efforts and avoid regulatory redundancy and minimize permit costs and delays.

Area-wide and mobile source emissions are addressed through General Plan policies that target specific sources. Transportation policies have been designed to reduce area-wide PM₁₀ levels by reducing both the number of vehicle miles traveled and the number of vehicle trips. Grading and road maintenance policies also work to reduce PM₁₀ emissions. Incentives for energy efficient building construction will help reduce emissions related to residential and commercial energy consumption, including woodstove emissions.

Naturally occurring PM₁₀ from wildfires may be reduced by decreasing the occurrence and severity of wildfires. Provisions in the Forest Resources Chapter and Safety Element support fuel hazard reduction programs and initial attack on wildfires that may adversely impact the air quality of local population centers.

Greenhouse Gas Emissions and Climate Change

California is the fifteenth largest emitter of greenhouse gases (GHGs) in the world, representing about two percent of worldwide emissions. In an effort to help curb global warming, new state laws regulating GHGs were enacted in 2006. Assembly Bill 32, the Global Warming Solutions Act, requires the state to implement a series of actions to achieve a reduction in GHG emissions to 1990 levels by 2020.

Through AB 32, the statewide cap for 2020 GHG emissions has been set at 427 million metric tons of carbon dioxide equivalents (MMTCO₂E). Reducing GHG emissions to this level means cutting approximately 30% from business-as-usual emission levels projected for 2020, or about 10% from today's levels. On a per-capita basis, that means reducing our annual emissions of 14 tons of carbon dioxide for every person in California down to about 10 tons per person by 2020.

California's draft Climate Change Scoping Plan (June 2008) recommends 2 million metric tons carbon dioxide equivalent MMTCO₂E reduction in GHG emissions by 2020 from local government actions. The Scoping Plan believes local government can directly influence:

- o **Energy.** The energy used in local government buildings, equipment, and infrastructure as well as the amount of energy used by community businesses and residents through building codes, conservation programs, and other mechanisms.
- o **Waste and Recycling.** Local governments own waste and recycling activities and the carbon footprint of their jurisdiction's waste and recycling operations through collection system adjustments and promotion of waste reduction and recycling.
- o **Water and Wastewater Systems.** Water use in municipal operations and through community-wide water conservation and reclamation program efforts.
- o **Transportation.** Increases in the carbon efficiency of government fleets and local transportation planning processes to increase the use of transit,

- carpooling, biking, and walking. Population growth can be planned and distributed in a carbon-efficient way.
- **Design.** Siting and design of new developments in a way that reduces greenhouse gases associated with energy, water, waste, and vehicle travel.

On December 4, 2007, the Board of Supervisors joined the International Council on Local Environmental Initiatives' (ICLEI) campaign to reduce local carbon emissions using a five-step process:

- 1) Conduct a baseline emissions inventory and forecast of emissions growth.
- 2) Set an emissions reduction target.
- 3) Develop a Climate Action Plan to meet the emissions reduction target.
- 4) Implement the Climate Action Plan.
- 5) Monitor and verify progress and results.

Through this process, the County intends to lead by example and reduce GHG emissions in its own operations to 10% below 2003 levels by 2020 (current AB 32 goal). Through this General Plan and participation in a countywide Climate Action Plan, the County intends to reduce GHG emissions in the unincorporated area resulting from its discretionary land use decisions to 10% below 2003 levels by 2020. The County will also partner with the Redwood Coast Energy Authority and local cities to attain this level of reduction for the entire county.

CEQA requires public agencies to identify the potentially significant effects on the environment of projects they intend to carry out or approve, and to mitigate significant effects whenever it is feasible to do so. AB 32 establishes by law that GHG emissions cause significant adverse impacts to the environment, so the General Plan must include feasible mitigations to offset the GHG emissions associated with the Plan.

The Plan includes a range of mitigations for reducing GHG emissions and mitigations to achieve increased carbon storage within the County. Increasing carbon storage on timber and agricultural lands may be the County's most effective means to combat global warming

The State's 2020 target for California's forest lands is to retain the current carbon storage capacity of California's forests through sustainable management practices, reducing the risk of wildfire, and the avoidance or mitigation of land use changes that reduce carbon storage. This equates to 5 MMTCO₂E of carbon storage, which is more than 10% all of non-transportation reductions planned through 2020, underscoring the role that forest lands will play in California's efforts to reduce GHG emissions.

The state's first forest carbon storage project to be verified through the California Climate Action Registry was located in Humboldt County on 2,100 acres owned by the van Eck Forest Foundation. The project generated more than 500,000 tons of carbon credits that are being sold to interested purchasers. Under AB 32, California is planning to implement a cap-and-trade program by 2012 that could increase the demand for verifiable carbon credits. This may create increased financial opportunities for forest and agricultural landowners in Humboldt County willing to manage their lands consistent with accepted carbon storage protocols.

While timber management is regulated by the state under the Forest Practices Act, this Plan proposes the development of a program that could provide carbon credits to local forest landowners who voluntarily agree to long-term restrictions on land uses that increase GHG emissions. These carbon credits could be registered and potentially sold under a GHG emissions cap-and-trade program and provide a financial incentive to maintain lands in resource production.

**Attachment 3
Planning Commission
Plan Alternatives Review Guide**

Attachment A

Planning Commission Plan Alternatives Review Process Guide

Prior to Hearing:

Step 1. Staff provides the Commission with: 1) narratives found within the Plan of the Chapter or Element under review; 2) the Key Issues chart with the staff's identified "short list" of key policies, standards and/or implementation measures identified in the first column of the chart; and 3) the Plan Alternatives Comparison charts with the "short list" highlighted in yellow. These items will be provided to the Commission at least two weeks prior to the proposed hearing date.

Note: The items identified on the staff's "short list" were identified by staff because they are: 1) a major shift in county policy; or 2) the policy or subject matter received a high level of public interest or comments; and 3) staff believes the item warrant further discussion by the Commission prior to a recommendation to the Board.

Step 2. Planning Commissioners review material at home and identify their initial "short list" of key policies, standards and/or implementation measures and any recommended revisions or comments they wish to make regarding these policies.

During First Hearing:

Step 3. Receive a staff report on the key policy issues and identified "short list."

Step 4. Receive public comments.

Step 5. After close of public hearing, each Commissioner verbally provides staff with their final "short list" of key policies, standards and/or implementation measures.

Prior to Second Hearing:

Step 6. Staff compiles the master voting chart of key policies, standards and/or implementation measures and send to Commission prior to meeting and post on web.

Step 7. Commissioners fill out the voting chart. A completed voting chart would include for each short list policy one or more of the following: a Commissioners vote, a recommended wording change, a specific question of staff or a comment or opinion to be recorded and expressed to the Board of Supervisors.

During Second Hearing:

Step 7. Receive a staff report summarizing the master "short list" which includes the policies, standards and/or implementation measures identified by the Commission and staff for further deliberation. The Alternative "B" version of policies not identified on the short list would be considered a slate of recommended policies for the draft Plan.

Step 8. Receive public comments.

Step 9. Beginning with the first short list policy the Chair asks each member to express their initial vote or comment on the policy. After each member's comment and vote are captured for the

record, the Chair may move on to the next policy or subject the policy to discussion and deliberation between members. After sufficient deliberation, the chair will call for final comments and straw votes. If necessary, the Chair may make a request to staff to revise the policy or provide additional information and continue voting on the policy to the next meeting.

During Third Hearing:

Step 10. Receive a staff report on any outstanding items from the previous meeting.

Step 11. Receive public comments.

Step 12. Repeat Step 9 until finished with deliberations.