



December 5, 2008

Ms. Mary Nichols
Chair, California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95814

Subject: City of Irvine Comments on Air Resources Board Proposed Scoping Plan

Dear Chair Nichols:

On behalf of the City of Irvine, thank you for the opportunity to comment on the California Air Resources Board's (ARB) Proposed Scoping Plan (Scoping Plan).

City of Irvine Actions:

The City of Irvine is proud of the work already underway or completed to reduce our City's greenhouse gas emissions (GHG emissions). Mayor Beth Krom was an early signatory of the U.S. Conference of Mayor's Climate Protection Agreement in 2006. To support the Mayor's commitment, the City has committed funds to prepare a Climate Action Plan (CAP) as a follow-up to the Irvine Energy Plan adopted by the City Council in July, 2008. The intent of the CAP is to develop baseline (1990) and future (2020) estimates of GHG emissions for the City of Irvine General Plan land use categories and a strategy and target for reducing existing and future GHG emissions, including emissions from electricity and natural gas use. This will be done using the City's existing Geographic Information Systems (GIS), in partnership with the utility companies, so that GHG emissions can be calculated, updated, and monitored as individual development projects occur throughout the City in the future.

The CAP will, upon completion, promulgate strategies that reduce GHG emissions by reducing energy consumption through the implementation of various energy efficiency programs and policies that are substantiated and justified through the analytical CAP framework and data evaluation tools that will be developed. By integrating the CAP with the Irvine Energy Plan, and utilizing the best available GIS based data, the project will provide a powerful mechanism for the City to identify, implement, and monitor energy reducing measures over both the short- and long-term.

In summary, this demonstration of innovative leadership from the City of Irvine will result in the development of a comprehensive, citywide energy use tracking and measurement tool. This tool will incorporate a powerful GIS interface to maximize the potential for designing and implementing successful energy saving programs and policies. This approach will be transferable to cities throughout the State where it can be utilized to carefully assess current and future energy consumption patterns. In this way, it will assist with future utility system planning, calculating the potential energy and energy service demands from new developments, and identifying opportunities for the most cost-effective energy use reduction programs and policies.

Summary of Comments:

The City of Irvine finds:

- The Final Scoping plan should consider and carefully emphasize opportunities where local agencies have the most control and ability to implement. ARB should identify and describe areas where the state government can clarify local authority to address energy and emissions issues, such as the ability to more easily set more aggressive local energy efficiency requirements for new construction.
- ARB should provide an implementation roadmap for the achievement of the 2020 and 2030 zero net energy building goals. This should include guidance on the establishment of consistent energy and emissions performance benchmarks, financing mechanisms, and timelines for technology deployment.
- ARB should provide the participation of new and existing building in green building carbon credit markets to provide access to private capital needed to realize cost effective emissions reductions.
- ARB should ensure that the green building code produced by the State Building Standards Committee is consistent with the goals of AB 32. This means that performance required to meet the code is consistent with levels of performance required under AB 32.
- ARB should provide the tools and procedures necessary to implement SB 375.
- ARB and the California Public Utilities Commissions should direct utilities to provide energy consumption data to local agencies at levels of spatial and temporal resolution suitable for land use planning as determined by local agencies (e.g., seasonal energy use estimates aggregated to Census tracts or individual land use projects).

General Comments:

Opportunity for Local Government Input

The Scoping Plan recognizes that local governments, such as the City of Irvine, are essential players in the implementation of the Plan. Our ability to comment on and be involved in the development of the methodologies and tools used to implement the various measures of the Plan will be critical to ensure that the implementation at a local

level is efficient, effective, and equitable. How this process will occur is not entirely clear and should be clarified in the document.

Additional Credit for Local Government Measures

The City requests that the Scoping Plan recognize the efforts of local governments towards non-transportation/land use actions. Recommended actions should include those that a local agency has the most control and ability to implement, such as, but not limited to, implementation of public education programs, distribution of materials, or implementation of other GHG emissions reduction programs. This requires more explicit consideration of existing authorities available to local governments and, where appropriate, discussion of limitations of existing authority. The City has been aggressive in pursuing the use of its existing authorities (e.g., permits for *new* construction), and it would welcome partnerships that help it address important sources of emissions that are difficult to address under existing processes (e.g., emissions from *existing* buildings and industrial facilities).

Water Efficiency

The City recognizes measures that improve water efficiency serve a dual role by reducing GHG emissions and mitigating the impact of a reduced Sierra snow pack and water supply to Southern California. The City is not supportive as to ARB's rationale for assessing the public goods charge as a flat rates per connection rather than based on a customer's actual water use. It would appear to make more sense to reward conservation rather than large, inefficient users. The City's local water provider, The Irvine Ranch Water District (IRWD), has successfully employed a volume-based fee to its users to elicit water conservation throughout its service territory. A volume-based fee would send a pricing signal that conservation and efficiency is conducive for saving money as opposed to simple mandatory retrofits. A volume-based fee could also be used to reflect the embodied energy and carbon in water supplies.

Energy Efficiency

The City has a long history of supporting energy efficiency and promoting City facilities that maximize energy efficiency and conservation. As of 2006, the City requires all new and retrofit municipal projects over 5,000 square feet to be LEED certified or better. To that end, the City is supportive of the Scoping Plan's goal to increase energy efficiency building and appliance standards and pursue additional energy efficiency efforts. The City is also supportive of the concept of "Zero Net Energy" homes (2020) and commercial buildings (2030). The City expects the state to work closely with local governments and private businesses to provide a road map that clearly and effectively addresses the financial and technical steps needed to achieve these ambitious goals, perhaps in the forthcoming Strategic Plan for Energy Efficiency and Demand Side Management. It is critical that this road map provide guidance to establish consistent energy and emissions performance benchmarks, describe financing mechanisms, and

provide a timeline for anticipated technology deployment *appropriate for each combination of climate zones and utilities in the state.*

The City anticipated that the Scoping Plan would identify specific strategies ARB proposes to increase building energy efficiency. Instead, the Plan identifies proposed targets for total electricity savings in terms of gigawatt hours and zero energy building without detailing specific strategies. Alternatively, the City expects ARB and other state agencies to provide technical and financial resources required to determine strategies appropriate for different types of buildings and land use in different parts of the state. Despite our substantial efforts to date, the City lacks the financial and technical resources to independently pursue this kind of advanced research and planning. The City would welcome the opportunity to pursue such work in partnership with relevant agencies and serve as a model for jurisdictions across the State.

Additionally, most of California's current efficiency programs are administered by the Investor Owned Utilities (IOU). The Appendices correctly note, "... achieving new levels of energy efficiency would require novel approaches that go beyond building appliance standards and beyond utility efficiency programs." However, ARB is largely relegating these critical issues to the IOUs forthcoming Strategic Plan for Energy Efficiency and Demand Side Management for the period from 2009-2020, which the Appendices indicate will be focused on achieving the California Public Utilities Commission (CPUC)'s zero energy targets. Further, the existing utility programs have not achieved the level of energy savings possible or desired, in part because they depend on a single entity (utilities) to deliver a service (energy savings) that is the exact opposite of their core expertise (selling energy). Decoupling and shareholder incentives helps motivate utilities, but does not provide an incentive to the market to create the broad savings that are necessary.

The City is requesting additional detail on how energy efficiency programs and related incentives can be applied locally to encourage existing building retrofits. This approach may require taking some of the IOU's current authority and redirecting it to the local governments and their associated non-profits. The City is recommending that ARB, or another State-appointed agency, establish a green building carbon credit as an emission reduction credit/offset that can be sold into the cap and trade compliance market and/or local or regional exchanges (e.g., the South Coast Climate Exchange). In any case, the primary concern is to recognize the need to create market mechanisms that can bring private capital into energy efficiency and renewable energy supply at local and regional levels. By adopting such a program, California would set an impressive precedent for the rest of the United States to follow by providing a market-based strategy to improve energy efficiency in the built environment in a far more comprehensive way than is currently possible under the existing structure of the utility-based programs.

Green Building

The City is supportive of green and sustainable building practices in new and existing public, residential, and commercial buildings. The City supported the State Building Standards Commission new voluntary green building standards as a key component in the State achieving sustainable communities in the future. The City is currently investigating whether to formally adopt the new Code within our own Building Code prior to the required timeframe of 2011. ARB should work with the State Building Standards Committee to ensure that achievement of the Code is consistent with support for AB 32 goals. The Code must be clarified and supplemented with processes to educate stakeholders about the goals and features of the Code and ensure implementation to support the goals of AB 32.

The City is also supportive of the ability for local governments to voluntarily go above and beyond any existing State Green Building Standards. AB 2939 (Hancock, 2008), which was vetoed by the Governor, would make such local actions less cumbersome. The ability for local governments to voluntarily go beyond the State Green Building Standards is one more way for cities to lead in GHG reduction in the future. In addition, the City is also supportive of the notion that cities that enact stronger local green building standards should be able to count the green building measures as additional GHG reductions. In 2006, the City of Irvine created and adopted a voluntary green building program for both residential and commercial projects called "Irvine Build Green." The City was the first in Orange County to enact such a voluntary program.

Maintaining the 5 MMT Regional Transportation-Related GHG Target

While the City of Irvine is very supportive of the programs and policies outlined in the Scoping Plan, it is crucial for State policymakers take account for the means that will be needed to achieve the goals. AB 32 requires that reductions in GHG emissions must achieve the maximum technologically feasible and cost effective reductions for the ARB to "consider the cost-effectiveness of these regulations" (HSC §38560). In addition, the City believes that the Scoping Plan should appropriately allow the SB 375 process to develop regional transportation-related GHG targets. The City would encourage ARB to support the funding allocation within SB 732 for the Municipal Planning Organizations (MPOs) so that both the Sustainable Community Strategies and Alternative Compliance Plans can be fairly mandated. Implementation of the regional planning processes in SB 375 is currently in the development stage. The 5 MMT figure, while a place holder, nevertheless sets an appropriate benchmark that helps assure that the State can achieve its overall 2020 goal.

Consistent Modeling Analysis

The tools necessary to identify, evaluate, and measure the effectiveness of various actions that could reduce GHG emissions are not fully developed. Those that are developed are extremely complex and rely on significant amounts of regional data and

information. As discussed in the Plan, models are necessary to evaluate the interactions between regional transportation systems and land uses are not yet fully developed and often lack the ability to address and account for small-area land use changes when evaluating the potential reductions in GHG emissions. The Plan recognizes that in these models, it is difficult to measure how many trips and for what distances people will opt for alternative means of transportations, including opting to walk to a destination as opposed to driving. Additionally, the Plan should clearly indicate the SB 375 does *not* address the consequences of land use or building design decisions for energy use and GHG emissions. The City believes these issues are important, and that SB 375 should *not* provide exemptions to the requirements for emissions reductions associated with land use, building design, water conservation, solid waste, construction, or other emissions sources.

It is a long-standing concept that environmental policy may be set with models, but it is ultimately evaluated with on-the-ground data. This is particularly important given the complexity and diversity of current approaches to estimate GHG emissions. Irvine believes that it is best to establish regional performance measures that can be clearly linked to local metrics. In expanding on this consideration, the City offers that the analytical methods must recognize the inherent differences between the sources of GHG emissions and resist the temptation to simply add together emissions estimates based on very different calculations with significantly different levels of uncertainty. Rather, ARB and other state agencies can support local and regional efforts to establish systematic accounting procedures that allow for more reliable estimation of emissions and emissions reduction between places and emissions sources. Additionally, GHG emissions will change over time dependent on actions of a variety of entities. For example, each power utility and water agency will have different coefficients for GHG emissions dependent upon their sources of energy or water. Further, these coefficients will change over time as these industries implement measures to reduce their GHG emissions. Therefore, measuring reductions of GHG emissions due to local efforts is likely to change over time and be easier to measure at a regional level. It will be important for the Plan, and subsequent rules and regulations developed to implement the Plan, to recognize these issues in order to measure the success and efficiency of various programs as they are implemented.

Most importantly, through the City of Irvine's experience in collecting information for our GHG inventory, the City strongly believes that efforts to promote and development the analytical methods should also be expanded to incorporate support for regional data sharing opportunities. For example, ARB and the California Public Utilities Commission could aid local governments by creating a clear responsibility for utilities to provide information about energy consumption to local agencies at a level of spatial and temporal resolution suitable for land use planning (e.g., seasonal energy use estimates aggregated to Census tracts or individual land use projects). Such direction would respect the utilities concerns about customer privacy while providing the foundation of quantitative information needed to establish performance baselines and monitoring future energy use and emissions. The City recommends that the Plan support these data sharing opportunities and promote their development throughout the State.

Definition of Baseline

What constitutes or defines "business as usual" (BAU) in the Plan is not clearly identified. Because the BAU scenario is the measure upon which success will be determined, it is necessary to understand the factors that lead to the emissions identified as BAU. The City requests that a full discussion of the methodology and the assumptions in the Plan to help ensure regions throughout the State are able to measure their success in implementing the measures included in the Plan.

Inaccuracy in Local Government Reduction Target

In recognition of the importance of local governments in the successful implementation of AB 32, the City recommends a GHG emissions reduction target for local government municipal and community-wide emissions of a 15 percent reduction from current levels by 2020 to parallel the State's target. However, it is important to clearly recognize that this reduction is taken from a 2008 baseline and not a 1990 baseline. When examined more closely, the actual target is 30 percent when taken in total from 1990 to 2020 (i.e. 1990 -2008 15 percent combined with 2008-2020 15 percent for a total of approximately 30 percent reduction). This clarification needs to be addressed in the Final Scoping Plan so as not to mislead local governments in their assigned target reduction. A suggested route would be for CARB to provide a quantified target for the 2020 Reduction (MMTCO₂E) in Table 2: Recommended Greenhouse Gas Reduction Measures (p. 17) for Local Government Operations. Currently, there is a placeholder of "To Be Determined."

Quantified Reduction Goal Clarification

The City notes that it appears that the Proposed Scoping Plan maintains the 169 MMTCO₂E total GHG emissions reductions adopted by the CARB in December 2007. However, in a summary of the emissions reduction that may be achieved by the various measures in the Plan (Table 2), a total of 174 MMTCO₂E total GHG emissions reductions may be realized. It is not clear if the goal remains in the Plan to achieve the 169 MMTCO₂E emissions reductions or if a new goal of 174 MMTCO₂E is being established. Further, it is not clear if the 169 MMTCO₂E remains the goal and therefore, there is now some flexibility in the totals to be achieved by each of the measures.

Funding Mechanisms for Local Government

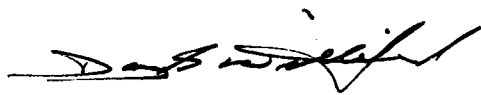
As both the State and local governments are faced with critical budget shortages, additional costs to heavily invest in GHG emission technologies in the next two to three years will become more burdensome for local governments. While local governments can influence development design to a certain extent, the reality is that developers will only build projects that will be purchased by willing customers and that are profitable. In order to effect the desired change, incentives must be provided to the development community and local agencies in order to encourage more development in areas where the reductions in GHG emissions will be the greatest. The City of Irvine strongly

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encourages the ARB to consider funding mechanisms for local jurisdictions as it moves forward with the Scoping Plan. The City would support the Economic and Technology Advancement Advisory Committee (ETAAC) recommended creation of a California Carbon Trust as a possible mechanism for funding a number of initiatives at the local government level ranging from demonstration projects to green technology workforce training programs.

Thank you again for the opportunity to comment. The City of Irvine looks forward to working closely with the ARB in the future.

Sincerely,



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Community Development Director

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