Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

TO: **Cal EPA Climate Action Team Economics Subgroup**

FR: **Chris Busch, Ph.D., Union of Concerned Scientists**

DT: **21 September 2007**

RE: **Comments on *Updated Macroeconomic Analysis of Climate Strategies Presented in the 2006 Climate Action Team Report – Public Review Draft***

CC: **Linda Adams, Secretary for Environmental Protection**
Eileen Tutt, Deputy Secretary for External Affairs, Cal EPA
Mary Nichols, Chair, CARB
Chuck Shulock, Climate Change Program Manager, CARB
Edie Chang, Chief, Planning and Management, CARB

Recognizing that this is an interim step in the modeling effort that is ongoing in support of AB 32 implementation, the Union of Concerned Scientists offers only brief comments on the updated macroeconomic analysis released by the CAT Economics Subgroup on September 7, 2007.

We strongly support the effort to consider the value of co-benefits, in particular the reductions in air pollutants other than greenhouse gases, in the evaluation of mitigation options. Since AB 32 instructs CARB to maximize additional environmental and economic benefits in implementation, such an approach is clearly justified. To ignore the co-benefits of climate action in implementation would produce sub-optimal results.

The newly released materials, massive Appendix B in particular, indicate that significant effort has gone into refining the many measures and policy options that will serve as the building blocks for achievement of the necessary reductions. It is encouraging to see that after this additional work the result continues to be that climate action produces net economic benefits for California. No one is pretending that AB 32 implementation will impose no costs on anyone. The point these models make is that the net, aggregate results are positive after considering the value of reduced spending on energy and the economic stimulus that results from shifting spending from energy (much of which is imported) to goods and services that are produced in California. The use of the relatively low energy prices listed in Exhibit 8 would depress the value of the energy savings that many greenhouse gas mitigation measures yield. We look forward to future results with more realistic energy price assumptions.

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We wish to point out that substantial benefits from climate action remain not quantified in the current work – of course, avoided climate damage – but also improved energy security (less vulnerability to price spikes in oil and natural gas markets), improved public health (and resultant lower health care costs and improved worker productivity and student performance), and the inducement of improved innovation. On this last point, to the extent that AB 32 implementation will spur the development of new technologies, this will reduce the direct costs of mitigation options and will help California businesses capture larger shares of the rapidly expanding global markets for clean technology markets. David Roland-Holst's work includes explicit consideration of the possible benefits of induced innovation, which is a valuable contribution that we encourage the CAT Economics Subgroup and other modelers to follow.

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