

December 13, 2010

Chairman Nichols and Members of the Board
California Air Resources Board
1001 "T" Street
Sacramento, CA 95812

Re: Letter from Economists on the Proposed Regulation to Implement the California Cap-and-Trade Program

Dear Chairwoman Nichols and Members of the Board:

We commend the California Air Resources Board

We commend the California Air Resources Board (CARB) for its vision and leadership in the design of the proposed cap and trade regulation. An emission cap, combined with a range of regulatory and market-based implementation mechanisms, provides clear incentives for changes in business practices and the development of new technologies. We applaud CARB for laying the groundwork for the largest carbon market in the United States.

We support the maximum use of auctioning as the method of allocating allowances

We recommend the maximum use of auctioning as the method of allocating allowances, subject to a short initial period of adjustment. Auctioning is preferable because it raises revenue for the State of California, it provides a sharper price signal, and it avoids conferring a competitive advantage on incumbent firms. We would support a modest amount of free distribution of allowances to a carefully considered subset of trade-exposed industries, subject to periodic review.

We recommend a mid-course update of the identification of sectors singled out for special treatment due to potential leakage

We support distributing free allowances only for the purpose of addressing emissions leakages associated with trade-exposed industries. However, CARB staff has noted that limitations on the availability of data and staff resources¹ diminished the quality of the analysis that was performed to assess sectoral vulnerability. We, therefore, recommend that CARB complete a reassessment of leakage risk by 2014 and *not* specify how the protocol for special treatment of leakage would apply during the period 2015-2020.

We recommend returning a significant portion of the allowance value to the people of California

Although we expect the State to help finance investments designed to achieve low-cost emissions reductions, help adapt to climate impacts, help disadvantaged communities, and provide job training to acquire the skill sets needed for the new technologies and industries, the State should have flexibility in using the auction revenue.

¹ California Air Resources Board, *Proposed Regulation to Implement the California Cap and Trade Program*, October 28, 2010, Volume IV, Appendix K, p. K-14, online at: <http://www.arb.ca.gov/regact/2010/capandtrade10/capv4appk.pdf>

Organizational affiliations are for identification purposes only.

All of California will benefit from the improved health and lower pollution levels that will result from CARB's implementation of California's landmark legislation. We believe these policies can improve our energy security, create new business opportunities and more jobs, and provide incentives for innovation.

Sincerely,

-Original Authors-

W. MICHAEL HANNEMAN, Ph.D.
Chancellor's Professor
Department of Agricultural and Resource Economics
University of California, Berkeley
Berkeley, CA

CHARLES KOLSTAD, Ph.D.
Professor of Economics
Department of Economics
Bren School of Environmental Science and Management
University of California, Santa Barbara
Santa Barbara, CA

JASMIN ANSAR, Ph.D.
Western States Climate Economist
Union of Concerned Scientists
Berkeley, CA

-Additional Signers-

MICHAEL ANDERSON, Ph.D.
Assistant Professor
Department of Agriculture and Resource
Economics
University of California, Berkeley
San Francisco, CA

BEVIN ASHENMILLER, Ph.D.
Professor
Department of Economics
Occidental College
Los Angeles, CA

RICHARD ARNOTT, Ph.D.
Distinguished Professor of Economics
Department of Economics
University of California, Riverside
Riverside, CA

MAXIMILIAN AUFFHAMMER, Ph.D.
Associate Professor
Department of Agriculture and Resource
Economics
University of California, Berkeley
Berkeley, CA

KENNETH ARROW, Ph.D.
Stanford, CA
Nobel Laureate, Economics

EDWARD BARBIER, Ph.D.
John S. Bugas Professor of Economics
Department of Economics and Finance
University of Wyoming
Laramie, WY

Letter signatories compiled by the Union of Concerned Scientists

Organizational affiliations are for identification purposes only.

SEVERIN BORENSTEIN, Ph.D.
Professor
Haas School of Business
University of California, Berkeley
Berkeley, CA

CLAIR BROWN, Ph.D.
Professor of Economics
Director, Center for Work, Technology, and
Society
Institute for Research on Labor and
Employment
University of California, Berkeley
Richmond, CA

GARDNER BROWN, Ph.D.
Professor Emeritus
Department of Economics
University of Washington
Seattle, WA

DAVID BURRESS, Ph.D.
President
Ad Astra Institute
Lawrence, KS

DALLAS BURTRAW, Ph.D.
Washington, DC

CHRIS BUSCH, Ph.D.
San Francisco, CA

TRUDY ANN CAMERON, Ph.D.
Mikesell Professor of Environmental and
Resource Economics
Department of Economics
University of Oregon
Eugene, OR

RACHEL CLEETUS, Ph.D.
Climate Economist
Union of Concerned Scientists
Cambridge, MA

BOWMAN CUTTER, Ph.D.
Claremont, CA

EIRIK EVENHOUSE, Ph.D.
Associate Professor
Department of Economics
Mills College
Piedmont, CA

MARVIN FELDMAN, Ph.D.
Principal Economist
Resource Decisions
San Francisco, CA

JAMES FINE, Ph.D.
Economist
Climate and Air Program
Environmental Defense Fund
Sacramento, CA

ANTHONY FISHER, Ph.D.
Professor
Department of Agriculture and Resource
Economics
University of California, Berkeley
Orinda, CA

LEE FRIEDMAN, Ph.D.
Professor
Goldman School of Public Policy
University of California, Berkeley
Berkeley, CA

DAVID GALLO, Ph.D.
Professor Emeritus
Department of Economics
California State University, Chico
Chico, CA

JOSHUA GRAFF ZIVIN, Ph.D.
Associate Professor of Economics
School of International Relations and Pacific
Studies
University of California, San Diego
La Jolla, CA

THEODORE GROVES, Ph.D.
Professor
Department of Economics
University of California, San Diego
La Jolla, CA

STEVEN HACKETT, Ph.D.
Professor
Interim Associate Dean
Department of Economics
Humboldt State University
Arcata, CA

BRONWYN HALL, Ph.D.
Professor
Department of Economics
University of California, Berkeley
Berkeley, CA

Letter signatories compiled by the Union of Concerned Scientists

Organizational affiliations are for identification purposes only.

DARWIN HALL, Ph.D.
Professor
Department of Economics
Department of Environmental Science and
Policy
California State University, Long Beach
Long Beach, CA

JANE HALL, Ph.D.
Professor
Department of Economics
Co-Director, Institute of Economic and
Environmental Studies
California State University, Fullerton
Laguna Beach, CA

GEOFFREY HEAL, Ph.D.
Professor
Graduate School of Business
Columbia University
New York, NY

CHARLES HOWE, Ph.D.
Professor Emeritus
Department of Economics
University of Colorado, Boulder
Boulder, CO

LEA-RACHEL KOSNIK, Ph.D.
Associate Professor
Department of Economics
University of Missouri-St.Louis
St. Louis, MO

DOUGLAS LARSON, Ph.D.
Davis, CA

NEIL LEARY, Ph.D.
Carlisle, PA

ERIN MANSUR, Ph.D.
Associate Professor
Department of Economics
Dartmouth College
Hanover, NH

WADE MARTIN, Ph.D.
Professor and Chair
Department of Economics
California State University, Long Beach
Long Beach, CA

PETER MEYER, Ph.D.
President and Chief Economist
The E.P. Systems Groups, Inc.
Covington, KY

DAVID MILLER, Ph.D.
Assistant Professor
Department of Economics
University of California, San Diego
San Diego, CA

BRUCE MIZRACH, Ph.D.
Associate Professor
Department of Economics
Rutgers University
Westfield, NJ

ANDREW NARWOLD, Ph.D.
Professor of Economics
School of Business Administration
University of San Diego
San Diego, CA

NERMIN NERGIS, Ph.D.
San Diego, CA

DAVID NEWBURN, Ph.D.
Assistant Professor
Department of Agricultural Economics
Texas A&M University
College Station, TX

RICHARD NORGAARD, Ph.D.
Professor
Energy and Resources Group
University of California, Berkeley
Berkeley, CA

LON PETERS, Ph.D.
Senior Energy Economist
Union of Concerned Scientists
Cambridge, MA

MICHAEL REICH, Ph.D.
Professor
Department of Economics
University of California, Berkeley
Berkeley, CA

SIOBHAN REILLY, Ph.D.
Oakland, CA

KURT SCHWABE, Ph.D.
Associate Professor of Environmental
Economics and Policy
Department of Environmental Sciences
University of California, Riverside
Riverside, CA

Letter signatories compiled by the Union of Concerned Scientists

Organizational affiliations are for identification purposes only.

KRISTEN SHEERAN, Ph.D.
Executive Director
E3 Network
Portland, OR

ANTHONY WESTERLING, Ph.D.
Associate Professor
Sierra Nevada Research Institute
University of California, Merced
Mariposa, CA

KENNETH SMALL, Ph.D.
Professor Emeritus of Economics
University of California, Irvine
Irvine, CA

JOHN SORRENTINO, Ph.D.
Associate Professor
Department of Economics
Temple University
Glenside, PA

ROGER SPARKS, Ph.D.
Professor
Department of Economics
Mills College
Oakland, CA

SEIJI STEIMETZ, Ph.D.
Assistant Professor
Department of Economics
California State University, Long Beach
Long Beach, CA

STEVEN STOFT, Ph.D.
Berkeley, CA

WILLIAM SUNDSTROM, Ph.D.
Professor
Department of Economics
Santa Clara University
Palo Alto, CA

SCOTT TEMPLETON, Ph.D.
Associate Professor
Department of Applied Economics and
Statistics
Clemson University
Clemson, SC

TOM TIETENBERG, Ph.D.
Mitchell Family Professor of Economics,
Emeritus
Department of Economics
Colby College
Waterville, ME

Letter signatories compiled by the Union of Concerned Scientists