

# Joint Letter of Economic and Energy Experts to Mary Nichols on Maintaining Beneficial, Low-Carbon Transportation Policies in California

July 16, 2014

Mary Nichols  
Chair, California Air Resources Board  
1001 "I" St.  
Sacramento, CA, 95814

## Re: Maintaining Beneficial, Low-Carbon Transportation Policies in California

Dear Chair Nichols,

We commend your leadership in implementing the world's most comprehensive climate law and support your commitment to maintain transportation fuels as an integral part of the economy wide cap-and-trade program for carbon starting in 2015. Once transportation is brought within the program, California will be the first functioning economy-wide cap-and-trade program, providing a powerful boost for the national and international advancement of climate policy.

Separate from the national and international significance of including transportation fuels within California's cap-and-trade program, achieving the scheduled 2015 inclusion will create new opportunities for economic growth and innovation in California while also protecting the existing program design and performance. Accordingly, we strongly encourage the state to implement this next phase of the program on schedule.

By establishing a price for carbon reductions within the transportation sector, California will shift toward diversification of its transportation fuel mix through the creation of powerful economic signals to investors. Not only will diversification of transportation fuel supply reduce vulnerability to supply disruptions, a diverse fuel mix renders California more resilient to price spikes in the crude oil market that can erode statewide economic stability.<sup>1</sup> Further, as emerging alternative fuels achieve scale economies and become increasingly cost competitive with mainstream gasoline and diesel, overall consumer choice for affordable and less volatile fuels is increased. Finally, decreases in demand for gasoline and diesel, coupled with increases in demand and supply for alternatives, will likely cause gas and diesel prices to decline over time.

Notwithstanding the benefits of fuel diversification, delaying the inclusion of fuels in cap-and-trade, as some have recently requested, would have a significant downside risk of disruption both to ongoing innovation and emerging economic opportunities throughout California. For several years investors and business have been given the expectation that transportation fuels would be included in the next phase of the trading program beginning in 2015. Economic decisions have been made relying on this expectation and a change in course would punish the investors and early adopters that are the agents of innovation. Such a result would undermine stability and certainty which may affect the entire state economy and the ongoing success of the program.

California is at a crossroads of opportunity and innovation in the transportation fuels sector. The state's efforts have served as a global example of carbon policy while providing benefits to the state. It is time to support these developments by putting a price on carbon in the transportation sector.

---

<sup>1</sup> Transportation fuel price spikes have been associated with economic downturns; as policies smooth fuel costs variability, the entire economy could see ancillary benefits.

See Vedenov, Duffield and Wetzstein, Entry of Alternative Fuels in a Volatile U.S. Gasoline Market, *Journal of Agricultural and Resource Economics* 31(1): 1-13 (2006); Kneller and Young, Business Cycle Volatility, Uncertainty, and Long-Run Growth, *Manchester School, Special Issue*, 69:534-552.(2001); Sadorsky, Oil Price Shocks and Stock Market Activity, *Energy Economics* 21:449-469 (1999)

Sincerely,

Andrew Narwold PhD  
Professor of Economics  
University of San Diego

Anthony Leroy Westerling PhD  
Associate Professor, Environmental  
Engineering and Geography  
University of California, Merced

Beia Spiller PhD  
Economist  
Environmental Defense Fund

Bronwyn H. Hall PhD  
Professor of Economics, Emerita  
University of California, Berkeley

Chris Busch PhD  
Economist, Director of Research  
Energy Innovation, LLC

Clair Brown PhD  
Professor of Economics  
University of California, Berkeley

Dallas Burtraw PhD  
Darius Gaskins Senior Fellow  
Resources for the Future

Daniel A. Brent PhD  
Research Fellow, Department of Economics  
Monash University

Daniel Kammen PhD  
Professor of Energy  
University of California, Berkeley

David Ervin PhD  
Professor Emeritus of Economics and  
Environmental Management  
Portland State University

David Allen Newburn PhD  
Assistant Professor, Department of  
Agricultural and Resource Economics  
University of Maryland

Andrew J. Van Horn PhD  
Managing Director  
Van Horn Consulting

Antonio Rangel PhD  
Bing Professor of Neuroscience, Behavioral  
Biology and Economics  
California Institute of Technology

Bevin Ashenmiller PhD  
Associate Professor, Economics  
Occidental College

Charles Mason PhD  
Oil and Gas Economist  
University of Wyoming

Christian Traeger PhD  
Assistant Professor, Environmental  
Economics  
University of California, Berkeley

C.-Y. Cynthia Lin PhD  
Associate Professor, Department of  
Agricultural and Resource Economics  
University of California, Davis

Darwin C. Hall PhD  
Professor Emeritus of Economics  
California State University, Long Beach

Daniel Huppert PhD  
Professor Emeritus, School of Marine and  
Environmental Studies  
University of Washington

David Burress PhD  
President  
Kansas Progress Institute

David Gallo PhD  
Professor Emeritus, Department of  
Economics  
California State University, Chico

David Roland-Holst PhD  
Adjunct Professor, Department of  
Agricultural and Resource Economics  
University of California, Berkeley

David Zilberman PhD  
Professor, Department of Agricultural and  
Resource Economics  
University of California, Berkeley

Eban Goodstein PhD  
Director, Bard MBA in Sustainability and  
Bard Center for Environmental Policy  
Bard College

Gary W. Yohe PhD  
Huffington Foundation Professor of  
Economics and Environmental Studies  
Wesleyan University

James Fine PhD  
Senior Economist  
Environmental Defense Fund

Jane V. Hall PhD  
Professor of Economics  
California State University, Fullerton

Jason Scorse PhD  
Director, Center for the Blue Economy  
Monterey Institute of International Studies

Jonathan Isham PhD  
Professor of Economics  
Middlebury College

Julie A. Nelson PhD  
Professor and Department Chair, Department  
of Economics  
University of Massachusetts, Boston

Kenneth A. Small PhD  
Professor Emeritus of Economics  
University of California, Irvine

Larry Dale PhD  
Economist  
Lawrence Berkeley National Laboratory

Laurie Johnson PhD  
Chief Economist, Climate and  
Clean Air Program  
Natural Resources Defense Council

Don Fullerton PhD  
Gutgsell Professor of Finance  
University of Illinois

Frank Convery PhD  
Chief Economist  
Environmental Defense Fund

Harrison Fell PhD  
Assistant Professor, Division of  
Economics and Business  
Colorado School of Mines

James L. Sweeney PhD  
Professor of Management Science and  
Engineering  
Stanford University

Jasmin Sparks PhD  
Visiting Assistant Professor, Economics  
Mills College

John A. Sorrentino PhD  
Associate Professor of Economics  
Temple University

Joseph Cortright  
President and Principal Economist  
Impresa, Inc.

Katie Baird PhD  
Associate Professor of Economics  
University of Washington, Tacoma

Kristen A. Sheeran PhD  
Vice President, Knowledge Systems  
Ecotrust

Larry S. Karp PhD  
Professor of Agricultural and Resource  
Economics  
University of California, Berkeley

Lea-Rachel Kosnik PhD  
Associate Professor of Economics  
University of Missouri, St. Louis

Lee S. Friedman PhD  
Professor of Public Policy  
University of California, Berkeley

Lyuba Zarsky PhD  
Associate Professor, International  
Environmental Policy Program  
Monterey Institute of International Studies

Maximilian Auffhammer PhD  
Associate Professor, Department of  
Agricultural and Resource Economics  
University of California, Berkeley

Michael Hanemann PhD  
Professor, Department of Agricultural and  
Resource Economics  
University of California, Berkeley

Michael E. Wetzstein PhD  
Professor, Department of Agricultural and  
Applied Economics  
University of Georgia

Nathanael D. Peach PhD  
Assistant Professor of Economics  
George Fox University

Neil Leary PhD  
Director, Center for Sustainability Education  
Dickinson College

Peter Meyer PhD  
Professor Emeritus of Urban Policy and  
Economics  
University of Louisville

Randell Leach  
EVP and Chief Credit Officer  
One PacificCoast Bank, FSB

Richard B. Norgaard PhD  
Professor Emeritus of Energy and Resources  
University of California, Berkeley

Linda Cohen PhD  
Professor of Economics and Law  
University of California, Irvine

Matthew Barger  
Managing Member  
MRB Capital

Matthew E. Kahn PhD  
Professor, Department of Economics  
University of California, Los Angeles

Michael O'Hare PhD  
Professor of Public Policy  
University of California, Berkeley

Michael L. Anderson PhD  
Associate Professor, Department of  
Agricultural and Resource Economics  
University of California, Berkeley

Nehemiah Stone  
Principal  
Benningfield Group, Inc.

Paul Baer PhD  
California and Western States  
Climate Economist  
Union of Concerned Scientists

Rachel Cleetus PhD  
Senior Climate Scientist, Climate and  
Energy Program  
Union of Concerned Scientists

Richard Arnott PhD  
Distinguished Professor of Economics  
University of California, Riverside

Richard Plevin PhD  
Research Scientist, Institute of  
Transportation Studies  
University of California, Davis

Robert B. Richardson PhD  
Associate Professor, Department of  
Community Sustainability  
Michigan State University

Sonia Yeh PhD  
Research Engineer, Institute of  
Transportation Studies  
University of California, Davis

Theodore Groves PhD  
Professor of Economics, Emeritus  
University of California, San Diego

William F. Barnes PhD  
Associate Professor, Economics and  
Environmental Studies  
University of Portland

William M. Shobe PhD  
Professor of Public Policy  
University of Virginia

Roger Sparks PhD  
Professor of Economics  
Mills College

Steven C. Hackett PhD  
Professor and Chair,  
Department of Economics  
Humboldt State University

W. Douglass Shaw PhD  
Professor, Department of Agricultural  
Economics  
Texas A&M University

William M. Jones PhD  
Faculty and Coordinator of Business  
Strategy Program  
Portland State University

William A. Sundstrom PhD  
Professor of Economics  
Santa Clara University