



EMBARGOED UNTIL 12.8.10 at 10pm PST

**Contact: Roxanna Smith
323.466.2491**

**New Analyses Find that California Cap-and-Trade System Will Have Only
Minor Economic Impact**

**Poll Finds Increased Voter Support for AB 32 and Strong Backing for the
Proposed Emissions Trading Program**

Air Board to Vote on Cap-and-Trade Program December 16

San Francisco- More than one month after voters soundly defeated a ballot measure that would have suspended California's efforts to address climate change indefinitely, new research shows that state's proposed emissions trading or cap-and-trade program will create minimal economic impact, and California voters are solidly behind (64 percent) implementing this new program.

In anticipation of the California Air Resources Board (CARB)'s upcoming decision over a greenhouse gas emissions trading program, Next 10, a nonprofit nonpartisan research organization, commissioned a poll from the Field Research Corporation as well as five research papers from leading academic experts¹ to address the multibillion dollar issue of how California should distribute greenhouse gas allowances and the resulting revenue. The projected value of emission permits in 2012, the first year of California's cap-and-trade program, will be \$2.5 to \$7.5 billion. By 2020, the value will rise to an estimated \$7.3 to \$21.9 billion.

¹ David Roland-Holst:
Real Incomes, Employment, and California Climate Policy
University of California and Mills College

Adam Rose, Dan Wei, and Fynnwin Prager:
Aggregate and Distributional Impacts of Alternative AB 32 Allocation Strategies
Rose and Associates

Richard Morgenstern and Eric Moore:
California Industry Impact of a Statewide Carbon Pricing Policy with Output-Based Rebates
Resources for the Future

Jamil Farbes and Dan Kammen:
Government Investment in a Clean Energy Future
University of California

Dallas Burtraw and Ian Parry:
Options for Returning the Value of CO2 Emissions Allowances to Households
Resources for the Future



“How California designs its emissions trading program is a multibillion dollar question,” said F. Noel Perry, a businessman and Founder of Next 10. “Next 10 wanted to provide greater insight into the impacts of various design schemes on California jobs, energy prices and household income, as well as voter support. What we found is that an emissions trading program will have a negligible impact on California households and businesses, and that there is strong voter support for such a program.”

The top findings of the Field Research Corporation poll, completed November 11-23, 2010 among a random sample of 493 registered voters, are:

- 66 percent of California voters favor strongly (44 percent) or somewhat (22 percent) the 2006 law to reduce emissions of greenhouse gases that cause global warming (AB 32), up from 58 percent who backed the law when Field Research last polled on this topic in March.
- 64 percent of California voters favor strongly (34 percent) or somewhat (30 percent) creating an emissions trading program wherein businesses would be required to obtain tradable permits to continue emitting greenhouse gas emissions.
- Just over half of California voters (52 percent) favor distributing these permits for free rather than requiring businesses to purchase them (35 percent).
- If the state did require businesses to purchase the permits, 54 percent of California voters would favor using the resulting revenue to reduce cuts to state services, as opposed to returning the money to residents (39 percent).
- 73 percent of California voters agree strongly or somewhat that California can reduce greenhouse gases that contribute to global warming and expand jobs and economic prosperity at the same time. This is up from 69 percent who agreed with this statement in March.

“Ironically, the increased attention generated by Proposition 23, which sought to suspend AB 32 and was defeated by voters at the polls in November by a 62% to 38% margin, has had the effect of strengthening support for the law,” commented Mark DiCamillo, Senior Vice President of Field Research Corporation. Complete results from the poll are available at: www.next10.org.

Findings of five research papers from leading academic experts are highlighted in Next 10’s Summary report entitled “*Designing the allocation process for California’s emissions trading program: The multi-billion dollar question*” (<http://www.next10.org/next10/publications/trading.html>) and include:

Macroeconomic Impacts

- The impacts of an AB 32 cap-and-trade program on Gross State Product (the value of goods and services produced in California) will be very small. Each study finds that these impacts might range from very slightly negative to slightly positive depending on assumptions and policy scenario designs. (Roland-Holst, Rose et al)
- Leakage of business activity from California as a result of AB 32 is likely to be small. Any leakage will stem from the rather minor effect of the bill on the costs of production in most



competitive sectors. It is apparent that AB 32 adjustment costs do not outweigh the benefits of market proximity, network synergies, etc., currently enjoyed by firms now located in California. (Roland-Holst, Rose et al)

- Changes in retail electricity prices resulting from AB 32 and the emissions trading program will be very small. (Roland-Holst, Rose et al)
- Economic growth as well as income distribution impacts range from slightly negative to positive depending on the extent to which the opportunity cost of free allowances will be passed to the consumer or not. (The models examine the extreme cases: The structure of Roland-Holst's model enables a significant amount of carbon price pass through; Rose et al assumes none of it will be passed.) If costs are not passed along, then there is estimated to be a net positive impact of free allocations on consumers.
- According to one paper, 100 percent auction scenarios with an annual energy efficiency improvement of one percent produce the best jobs results. 115,000 jobs by the year 2020 result from the 100 percent auction scenario in which revenues are returned to Californians through dividends, while 109,000 jobs are produced by 2020 in the 100 percent auction scenario in which resulting revenues are returned to Californians through reductions in personal tax rates. (Roland-Holst)

Impacts on Industry

- Even if industrial producers failed to respond to incentives to use cleaner technologies, and they continued to use the same energy mix after the introduction of an emissions trading program, the impacts to California's energy intensive and trade exposed industrial sectors would be small. (Morgenstern and Moore)
- Under the formula embodied in federal legislation that passed the House of Representatives in 2009 (ACES), the impacts average 0.43 percent of the value of production for the most energy-intensive industries facing the greatest international competition. Given CARB's stated intention to be more generous to these sectors than under the federal proposal, the anticipated impacts should be even smaller and some sectors could well enjoy higher profits as a result. (Morgenstern and Moore)

Priorities for Revenue Investment

- A clear priority is for government investment to facilitate the capture of low cost greenhouse gas emission reductions that the emissions trading program alone would not achieve. This enhances cost effectiveness by overcoming market barriers inhibiting the transition to low carbon economy technologies that exist even after a price on carbon is established. (Farbes and Kammen)
- In light of the above, and AB 32's mandate to ensure fairness in implementation and environmental justice in particular and the need for California to adapt to climate change to the extent some warming is inevitable, research identifies a number of priority investments: 1)



Research, development and demonstration funding to speed the invention and commercialization of new advanced technologies, 2) incentives to bolster the diffusion of existing improved technologies, 3) investments in communities burdened by high pollution levels and low income, to capture public health benefits there and to enhance the program's fairness, and 4) adaptation to climate change recognizing that some global warming is inevitable. (Farbes and Kammen)

“One important takeaway from our research is that even in the most vulnerable business sectors—those that are very energy-intensive or trade-exposed—the impacts of a cap-and-trade program are quite small even without free allowances,” said Richard Morgenstern, senior fellow with Resources for the Future and author of *California Industry Impact of a Statewide Carbon Pricing Policy with Output-Based Rebates*.

“The research shows that giving away allowances for free helps energy-intensive industries, but this strategy actually hurts the CA economy overall. On the whole, the research shows that California would be better off economically without free allowances.” commented Perry.

Next 10 (www.next10.org) is an independent, nonpartisan organization focused on innovation and the intersection between the economy, the environment, and quality of life issues for all Californians. Next 10 funds research by leading experts on complex state issues.

Report Authors:

Dallas Burtraw is one of the nation's foremost experts on environmental regulation in the electricity sector. For two decades, he has worked on creating a more efficient and politically rational method for controlling air pollution. Burtraw is a member of the EAAC.

Jamil Farbes is a PhD student in the Energy and Resources Group at UC Berkeley. His research focuses on climate policy, effective carbon market regulation and risk in carbon markets.

Daniel M. Kammen is the Chief Technical Specialist for Renewable Energy and Energy Efficiency at The World Bank and Class of 1935 Distinguished Professor of Energy for The Energy and Resources Group, Goldman School of Public Policy at the University of California, Berkeley. He is a member of the EAAC.

Richard Morgenstern is a senior fellow with Resources for the Future. His research focuses on the economic analysis of environmental issues with an emphasis on the costs, benefits, evaluation, and design of environmental policies, especially economic incentive measures. His analysis also focuses on climate change, including the design of cost-effective policies to reduce emissions in the United States and abroad.

Eric Moore is a senior fellow and research assistant at Resources for the Future.

Ian Parry, a senior fellow at Resources for the Future, focuses primarily on environmental, transportation, tax and public health policies. His recent work has analyzed gasoline taxes, fuel economy standards, transit subsidies, alcohol taxes, policies to reduce traffic congestion and accidents, environmental tax shifts, the role of technology policy in environmental protection, the incidence of pollution control policies, and the interactions between regulatory policies and the broader tax system.



Fynnwin Prager is a Ph.D student at the University of Southern California, School of Policy, Planning, and Development. He received a Master's in Public Policy from the University of Southern California and a BSc in International Relations from the London School of Economics.

David Roland-Holst is an Adjunct Professor in the Departments of Economics and Agricultural and Resource Economics at UC Berkeley. Dr. Roland-Holst has extensive research experience in economics related to environment, development, agriculture, and international trade, authoring three books and over 100 articles and chapters in professional publications. He has served in academic posts in the US, Europe, and Asia and conducted research in over 40 countries, working with US and foreign national governments, the Asian Development Bank, Inter-American Development bank, Organization for Economic Cooperation and Development (OECD), World Bank, and several United Nations agencies. Professor Roland-Holst holds a Ph.D. in Economics from UC Berkeley.

Adam Rose is principal of Adam Rose and Associates. He is also Research Professor at the University of Southern California School of Policy, Planning, and Development. Dr. Rose's major research areas are the economics of energy and climate change policy. He is the author/editor of several books and more than 100 professional papers on these subjects, including most recently *The Economics of Climate Change Policy*. Dr. Rose has pioneered and applied methodologies to examine the efficiency and equity of environmental policy instruments and to estimate their macroeconomic impacts for the United Nations, U.S. EPA, and numerous state government agencies. He is the recipient of a Woodrow Wilson Fellowship, East-West Center Fellowship, and American Planning Association's Outstanding Program Planning Honor Award.

Dan Wei's research focuses on analyses of state/regional climate action plans, modeling of economic impacts of greenhouse gas (GHG) mitigation policies, design of market-based GHG mitigation policy instruments, and other technical issues related to policy assessment of GHG control strategies. She has participated in the analysis of cap and trade and/or carbon tax policies for several regions, and applied the REMI Policy Insight Model to analyze the macroeconomic impacts of climate action plans for several states. She is currently participating in a U.S.-China cooperative project to facilitate capacity building of low-carbon development planning in Guangdong Province, China. Dr. Wei is currently a Postdoctoral Research Associate in the School of Policy, Planning and Development at the University of Southern California.