June 22, 2012

Mary D. Nichols, Chair
California Air Resources Board
1001 "I" Street
Sacramento, CA 95812

RE: Comments on Cap and Trade Auction Revenues; May 24th Hearing Follow Up

Dear Chairwoman Nichols,

The undersigned clean energy businesses, industry groups, regional advocates, and investors would like to offer the following comments as follow up from CARB's workshop on May 24th, 2012 to discuss cap and trade revenue investments. We welcome the opportunity to discuss how a portion of auction revenues could be used to boost California's clean energy economy, encourage in-state investment, and create jobs while simultaneously reducing GHG emissions and furthering the goals of AB 32.

As CARB begins developing an investment plan for these funds, we believe there are a number of guiding principles that CARB should consider. These include:

- **Funds must be spent on projects that have GHG emission reduction benefits.** This is the critical legal nexus to guide how funds are spent. Attention to this nexus will ensure that the program remains on solid legal footing going forward.
- **Ensure coordination of investments.** Efforts should be made to avoid duplication of existing state programs. New investments should seek to fill gaps in areas of the clean energy sector that existing programs do not address; and where new investments overlap with existing programs, efforts should be made to maximize coordination.
- **Investments should maximize co-benefits.** Investments aimed at reducing GHG emissions if properly made can further a number of co-benefits including: improving air quality, public health and environmental justice; leveraging private investment and growing the economy as a whole; and increasing energy security and consumer choice. Investments that result from the cap and trade program should seek to take full advantage of these important co-benefits.
- **Investments should be flexible over time.** Investments should be able to adjust to changing market and demand trends over time as well as allow for new technologies to be developed and deployed in the future.

When we use the term "clean energy economy", we are referring to all aspects of both the supply and demand for clean energy technologies. Technologies include low-emission clean energy technologies, renewables, clean vehicles and fuels, energy efficiency and other GHG-reducing technologies throughout the supply chain.

In order for California to fully realize the benefits of our climate and energy policies, the clean energy sector should be viewed in the most holistic manner possible. Policies such as AB 32 will drive the demand for many clean energy technologies and while investments should be made to

ensure these technologies are deployed in an equitable and cost-effective manner, the state should also take a leadership position in helping maximize the extent that the supply of these technologies originates in-state. Investments that serve both supply and demand will generate meaningful GHG emission reductions, create jobs, and benefit the economy.

Investments made on the supply side can have GHG emission benefits by increasing energy security and reducing transportation-related emissions. Encouraging in-state supply for clean technologies achieves GHG emission reductions by minimizing transportation emissions associated with importing these technologies from elsewhere. Additionally, a move toward in-state production of these technologies will help ensure reliable access and prevent supply disruptions that may result from political unrest or trade conflicts abroad.

The state has existing programs that target various aspects of supply and demand for clean energy technologies. Many of these programs have proven to be effective and are worthy of receiving additional funding from cap and trade revenues. We also believe there are some critical gaps in existing programs that impede the ability for clean technologies to be created and deployed on a larger scale.

Many existing programs have GHG emission reduction benefits. With 2020 quickly approaching, the state needs to begin using cap and trade revenues to reduce GHG emissions as soon as possible. Given this timeline, it makes sense to consider directing a portion of the revenue towards existing programs that have proven GHG emission reduction benefits. These programs are already up and running, and stakeholders are already familiar with them. In the near term, this minimizes start-up hurdles and allows quick and efficient investment in GHG reductions. Here are a few existing programs aimed at clean energy development and deployment that should be considered for cap and trade investment:

- Clean energy technology and advanced clean transportation research, development, and deployment programs. Existing programs in this area include the Electric Program Investment Charge (EPIC), AB 118 program, and Clean Energy Business Finance Program.
- Customer-based incentive programs to encourage clean energy deployment and energy efficiency: Existing programs in this area include: Self-Generation Incentive Program, Energy Efficiency programs administered by the Public Utilities Commission and Energy Commission, New Solar Homes Partnership, and the Property Assessed Clean Energy program.

California also has a unique opportunity to invest a portion of these funds in new programs that can drive the clean economy and further reduce GHGs. Here are a few existing funding gaps and new mechanisms that should be considered for receiving cap and trade revenues:

- Financing programs that leverage private capital. Financing programs for manufacturing, infrastructure development, and energy efficiency improvements can help the state get the most 'bang for its buck' and provide a strong signal to potential investors that California is dedicated to growing this industry. These programs, if implemented properly, can leverage private investments and stretch the state's dollars further.
- Research, development, and demonstration of new clean energy technologies. CARB should focus on technologies that enable potentially "transformational" changes. California already invests in some energy RD&D through existing programs such as EPIC and the AB 118 program. However, these programs are not necessarily optimized to reduce greenhouse gases and capture co-benefits. ARB may determine that a more targeted RD&D program is

needed to achieve the AB 32 goals. Furthermore, support for R&D through structures that address the critical challenge of scaling technologies from the lab to the marketplace and building first commercial facilities to support next generation solutions here in California can help in-state clean energy companies reach production levels that allow them to compete internationally.

- New markets programs. Technology neutral incentive programs that have GHG reductions as the principal goal. This a fundamental change from current programs that focus on technology type. Technology neutrality will allow market innovation with the focus on achieving the greatest GHG reductions.
- Reduce barriers to clean energy deployment. Increase access to clean energy systems for all Californians with an emphasis on deployment in disadvantaged communities.
- Market incentives and support for improved energy management. With California having deployed over 14 million smart meters, we must ensure that consumers can access easy-to-use, automated home energy management tools that use the capabilities of smart meters to better manage electricity use. According to the American Council for an Energy Efficient Economy's review of 36 pilot studies, real time energy data and feedback tools enabled households to reduce energy use by an average of 12%. With electricity bills expected to rise in coming years, it is important that California consumers have the tools they need to better manage their energy use and reduce the electricity bills to below what they otherwise would be.

We would welcome the opportunity to work with you and your staff on the ideas conveyed by this letter. Thank you for your time and consideration.

Sincerely,

Sara Birmingham, Solar Energy Industries Association

John Boesel, CALSTART

Andrew Campbell, Tendril Inc.

William Coleman, Mohr Davidow Ventures

Paul Gutwald, Simbol Materials

Jim Hawley, TechNet

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Sanjay Ranchod, SolarCity

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