



Invest in a Clean Energy Future and a Healthy Environment: AB 32 Cap-and-Trade Revenue Use

Recommendation: Use revenues generated by the AB 32 cap-and-trade program to maximize the reduction of greenhouse gas (GHG) pollution and help the state prepare for a changing and volatile climate.

Issue: In 2012, the California Air Resources Board will begin auctioning GHG emission allowances as part of the AB 32 cap-and-trade program. Estimates indicate that anywhere between \$500 million to more than \$1 billion will be generated in the 2012 – 2013 budget year. In his January 2012 budget, Governor Brown proposed to use these funds to support four broad categories (described below). In addition to the Governor's proposal, there are a number of bills in the 2012 legislature that focus on using revenue to meet the AB 32 goals, including: SB 1572 (Pavley), AB 1532 (Perez), SB 535 (De Leon), and AB 2404 (Fuentes).

The use of money raised in the state-run auction is subject to the determination of the legislature and the governor's office. Monies would be collected in an account (such as the Greenhouse Gas Reduction Account) within the Air Pollution Control Fund. The final decisions on how to spend the monies in this account will be made over the next six months. It is likely that the three largest decision making points will be: 1) the release of the revised state budget (May 2012); 2) the passage of a state budget bill or other subsidiary bills by the legislature (summer/early fall 2012); and, 3) the development of a revenue investment plan that conforms with the state budget process (summer / fall 2012). Each of these points offer an opportunity to engage in a positive discussion about the benefits of the cap-and-trade program and how auction revenue can support the goals of AB 32 and our member's interests.

Proposal: Fees generated by the cap-and-trade program should adhere to the legal precedent for use of regulatory fees established by *Sinclair Paint Co. v. State Board of Equalization* (1997). This means that cap and trade auction revenues should be directly used for helping to reduce GHG emissions in support of AB 32 goals. This can be done by decreasing the amount of GHGs generated by various human activities or by increasing capture of GHGs. The use of these fees for any other purposes risks exposing the program to legal challenges and undermining the public's support and the state's efforts to reduce its carbon footprint.

The Leadership Group's suggestions on this issue are important because of the opportunity to significantly shape this discussion. For both legal reasons and to ensure state policy goal success, the Silicon Valley Leadership Group supports using revenues in a way that corresponds to the categories outlined by Governor Brown in his January 2012 budget, including:

1. Clean and efficient energy – Through energy efficiency, clean and renewable distributed energy generation, and related activities.
2. Low-carbon transportation – Through the development of state-of-the-art systems to move goods and freight, deployment of advanced technology vehicles and vehicle infrastructure, production and use of advanced biofuels, and increased availability of low-carbon and public transportation.
3. Sustainable infrastructure development – Through strategic planning and development of major infrastructure, including transportation and housing.
4. Natural resource protection – Through measures associated with water use and supply, land and natural resource conservation and management, and sustainable agriculture.

In addition, auction revenues should meet the following criteria:

1. Fund those measures which are identified in the AB 32 scoping plan as delivering the greatest reductions by 2020, across the four categories outlined above based on the following criteria:
 - Fund cost-effective measures that deliver maximum GHG reductions for the dollar
 - Fund programs that deliver both immediate GHG reductions and support long-term high impact strategies
 - Fund measures which both reduce GHGs and help the state prepare for a changing and volatile climate

2. Administer funds in a way that addresses key obstacles to reaching our 2020 goal by doing the following:
 - Reinvesting economic returns from projects to sustain and grow funds
 - Utilizing existing administrative channels whenever feasible
 - Reducing structural barriers such as human and organizational capacity, permitting requirements and logistics, and other soft costs at the state and local levels
 - Maximizing public health, economic and environmental co-benefits, especially for disadvantaged communities and those communities most directly impacted by emission sources and/or climate change
3. The state should also include clear metrics for success in meeting our 2020 goal and milestones to track progress, while also providing a regular status report for public review.

RDD&D Financing Gaps

While cap-and-trade will encourage investment in innovative technologies and encourage scaling new solutions, it will not, in and of itself, help get these technologies to market as quickly as is needed to meet the state's GHG reduction goals. Therefore, it is important to also address the hurdles that stand in the way of full-scale deployment of various GHG reduction solutions over their life cycle (research, development, demonstration, and deployment (RDD&D)). The Leadership Group supports using auction revenues to aid the development and full-scale deployment of solutions that reduce GHGs through:

- **Applied research and development.** This area supports investment in applied science and technology that provide public benefits but for which there is no current clear business case for deployment of private capital in the near-term.
- **Technology demonstration.** This area supports assisting technology development through the "valley of death" and toward commercialization.
- **Market support.** This area involves supporting technologies that are commercially viable but still need public support to achieve economies of scale and be competitive with other more established technologies.
- **Market facilitation.** This area involves activities to address non-price barriers to adoption of new technologies, such as regulatory barriers and lack of information, as well as supporting market research and tracking of results.

Financing Vehicles

There are a number of vehicles that should be utilized to help address the financing gaps that exist to help get various solutions to scale, including:

- **Green bank** – Cap and trade revenue could be used as seed funding for the creation of a "green bank" to leverage financing for California clean energy companies. The model for this program could be the highly successful public-private partnership employed by the Federal Export-Import Bank. Connecticut has set up a quasi-public corporation called the Clean Energy Finance and Investment Authority (CEFIA). It makes loans up to 80% of the cost of developing and deploying a clean energy project and up to 100% of the cost of financing an energy efficiency project.
- **Revolving loan fund** – Cap and trade revenue could also be used as seed funding for a program that provides low interest loans to businesses, farms or public agencies to invest in clean energy or energy efficiency. The savings from these investments would then be used to pay back the loan and/or contribute to fund other investments.
- **Re-insurance** – California could institute a government-supported reinsurance program to mitigate risk for private insurers and thereby increase the availability and moderate the cost of relevant insurance products. This would help support deployment of commercial-scale projects employing emerging clean energy technologies.
- **Technology demonstration** – Technology demonstration programs could be supported with competitive grants to public agencies and the private sector.

Recommendations Regarding Program Categories

In addition, the Leadership Group's Environment, Energy, Housing and Transportation Policy committees support the use of auction revenue in the four broad program categories outlined by the Speaker and Governor as detailed below.

1. Clean & Efficient Energy

Large scale clean technology development and deployment will help reduce the Golden State's reliance on fossil fuels and lower the amount of GHGs produced. Existing vehicles that could benefit from new funding include:

- *Commercial PACE programs* – Provide needed capital
- *California Solar Initiative* (set to expire by 2017)
- *Energy efficiency retrofit and rebate programs* – Provide needed capital
- *Emerging Renewables Program / Self Generation Incentive Program* – needed capital
- *Streamlining Permitting* – Grants could be given to help address soft cost issues and red tape with regards to existing state agencies and institutions
- *New Solar Homes Partnership* – Fund and expand this program to also address energy efficiency and/or other technology solutions

2. Low-Carbon Transportation

The transportation sector is responsible for the largest percentage of GHG emissions in the state, primarily through use of petroleum fuels. The Leadership Group strongly supports a number of the items called out in the Speaker's bill including deployment of electric vehicles (EVs), EV infrastructure, biking and public transportation.

Potential revenue usage includes:

- Expand and improve transit capital and operations;
- Incentivize transit use by making transit more time and/or cost competitive with automobiles;
- Increase funding for bike networks and pedestrian amenities, with an emphasis on bicycle and pedestrian connections to transit;
- Augment funding for alternative fuel programs that promote the mass adoption of new technologies; and
- Fund High Speed Rail projects that benefit urban cores such as the Caltrain corridor.

3. Sustainable Infrastructure Development

Our land use patterns drive heavy greenhouse gas emissions from the transportation sector. Between 1975 and 2004, the number of miles driven by Californians increased more than 3% per year. In contrast, California's population growth was less than 2% per year during the same period.¹ Doubling neighborhood density can reduce both vehicle trips and the number of miles driven by about 5%.²

SB 375 required regional planning agencies to create a plan for how transportation and land use could reduce greenhouse gas emissions. The Leadership Group supported the legislation and is working to implement the bill at regional and local levels.

The major challenge in the process is obtaining local buy-in. Local cities and counties push back on issues like tying transportation funds to future housing production or planning for more homes. Communities cite challenges such as reduced money for affordable housing and inadequate sewer and school infrastructure as impediments to building compact infill.

Cap-and-trade revenue could be used to:

- Enact planning and zoning changes in Priority Development Areas. Priority Development Areas are local government nominated areas slated to take on more intense future growth;

¹ State of California, Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 1970-2004*. Sacramento, CA, December 1998 and United States Government, Federal Highway Authority, *Highway Statistics 1975-2004*, Washington D.C., 2005.

² Ewing R. and R. Certero, "Travel and the Built Environment," *Transportation Research Record*, Vol. 1780, pp. 87-114, 2001.

- Reward jurisdictions with flexible infrastructure funds when it approves compact homes and/or workplaces. This could be done through a program like the One Bay Area Grant or Transportation for Livable Communities; and
- Support new development that is more water and energy efficient and retrofit existing development to meet the same goals
- Plan and build compact, affordable homes and dense offices near transit paired with car-share memberships and transit passes.
- Focus new development in areas that require less water use per capita.

4. Natural Resource Management & Protection

Climate change is already leading to rising temperatures, increased rainfall variability, rising sea levels and other climatic changes such as more extreme weather events. Therefore, it is critical for the state to begin addressing the impacts of current climate variability and future climate change. The measures recommended below include reducing land degradation and promoting the optimal use of water resources. These measures provide the co-benefits of GHG mitigation and helping the state prepare for a changing and volatile climate.

Cap-and-trade revenues should support projects that:

- Protect, create and expand wetlands and other carbon sinks – preserve habitat and reduce damage (example – South Baylands restoration and flood mitigation project)
- Protect and promote agriculture that advances carbon sequestration – shift areas, change crops, provide shading, combat pests, etc.
- Promote wildfire prevention and emergency response
- Invest in water conservation and efficiency projects
- Expand re-use and recycling of water
- Promote new development in areas that require less water per capita

Economic impact: Since 2006, AB32 has spurred more than \$9 billion in investment in clean energy, helping spawn thousands of new businesses. A recent study by the Analysis Group showed that the nation's first cap-and-trade program, the Regional Greenhouse Gas Initiative, has created more than 16,000 jobs and added \$1.6 billion in economic value. California's program promises to create even more economic opportunities as it scales to become North America's largest carbon market.

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