Climate Law & Policy Project

December 2016

Comments from the Climate Law & Policy Project
on the Discussion Draft of the 2030 Target Scoping Plan Update

Climate Law & Policy Project (CLPP) is a non-profit organization established in 2007 to help formulate and advocate environmentally, socially, and scientifically sound policies to slow, stop, and ultimately reverse the buildup of greenhouse gases in the atmosphere and ensure that vulnerable communities are protected from climate impacts that cannot be avoided.

In light of the results of the 2016 elections, the focus of climate progress in the United States will turn even more to the states. California is already a national leader with regard to emissions reductions and climate policy, and its leadership will now be more important than ever. Accordingly, CLPP appreciates the opportunity to offer the following comments regarding the Discussion Draft of the 2030 Target Scoping Plan Update. In particular, in line with the objective articulated on page 30 of the Discussion Draft, CLPP recommends that the Air Resources Board (ARB) boost the power of the Greenhouse Gas Reduction Fund (GGRF) to achieve the 2050 target earlier – thus potentially preventing global warming of 1.5°C – by distributing at least some of the funds through a cost-effective price-and-subsidize (P&S) system.

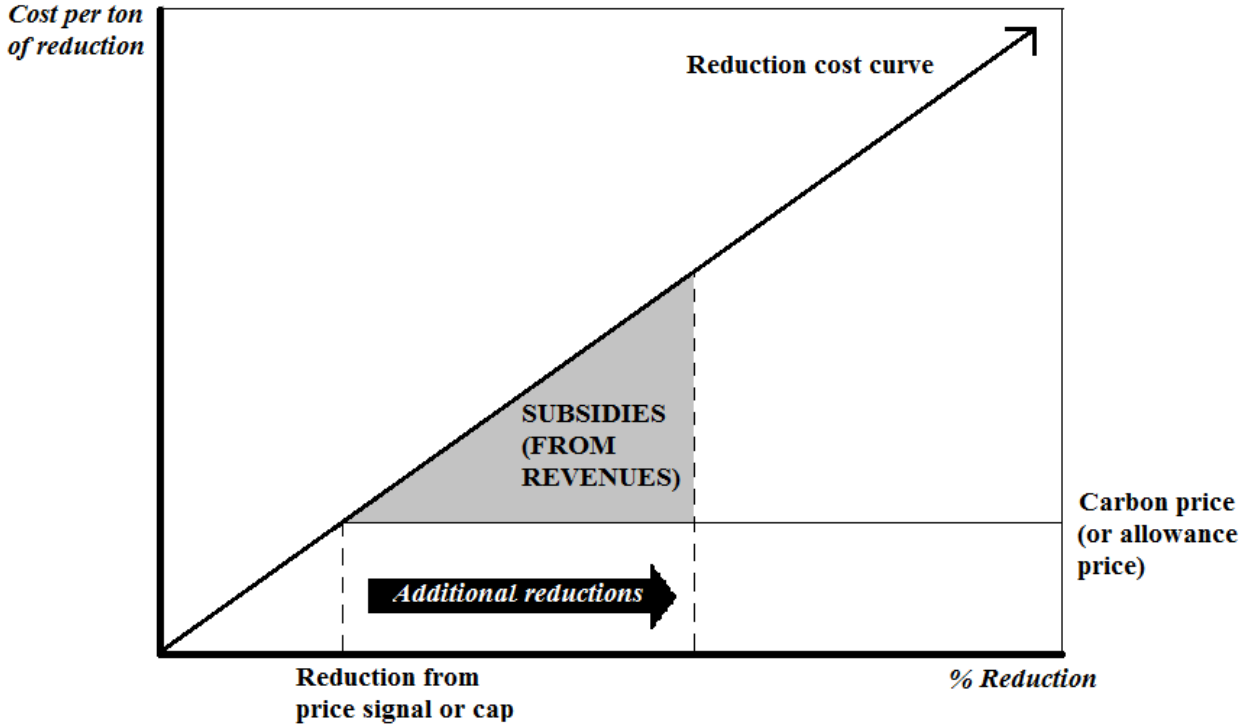
1. Basics of a Cost-Effective P&S System

A P&S system uses revenue from a carbon price instrument, such as a carbon tax or cap-and-trade system that auctions allowances, to cost-effectively subsidize reductions additional to those that the price instrument alone would achieve.

A P&S approach includes the following key elements to ensure cost-effectiveness and the achievement of additional reductions:

- *Reverse auctions*: Reverse auctions have achieved cost savings in purchasing renewable energy, energy efficiency, and other emission reductions.
- *Delta subsidies*: To ensure that subsidies enhance rather than duplicate the effects of the carbon price or cap in driving reductions, they should cover only the difference (the delta) between the abatement cost and the carbon price.
- *Allowance withdrawal*: Under a cap, for each subsidized reduction achieved, an allowance should be retired or withheld from sale to ensure reductions are additional to the cap.
- *Subsidy leverage:* To maximize early reductions, as little as possible should be spent to get as many projects as possible started as early as possible. Subsidies, ideally, should be paid as reductions are achieved, and lump-sum, upfront payments should be avoided.

As shown in the simplified figure below (e.g., with a linear marginal abatement cost curve), a P&S system could achieve substantially more reductions than a carbon price instrument alone, at the same cost to emitters and consumers as a conventional approach.



Based on this simplified figure, the table below shows, in theory, how substantially reductions could be increased if all carbon price revenues were directed towards cost-effective subsidies for additional reductions.

Reduction with Conventional Price Instrument	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%
Reduction with P&S Approach	31%	44%	53%	60%	71%	80%	87%	92%	95%	98%	99%

2. Implementing a P&S System in California

A January 2016 report by the California Legislative Analyst's Office (LAO) identifies some key issues regarding spending of allowance auction revenues.[1] The report notes that spending allowance auction revenues on reductions within the cap results in extra allowances that can be used by others under the cap – which means those subsidized reductions from capped sources are not, in fact, additional. Furthermore, the LAO report suggests that such revenue spending actually increases costs of meeting the cap, as more expensive reductions are achieved due to

[1] California Legislative Analyst's Office. (2016). *Cap-and-Trade Revenues: Strategies to Promote Legislative Priorities*. http://www.lao.ca.gov/Publications/Report/3328

subsidies, while sources with less expensive reductions that they would otherwise have made instead use the cheaper extra allowances. A P&S system could remedy these problems.

Applied to California's cap-and-trade system, a cost-effective P&S cap would involve putting all (or, more realistically, some) allowance auction revenues into a fund and holding a reverse auction that offers subsidies – equal to the difference between the allowance price and the per-ton abatement cost – to any emitter that wants to submit a bid for achieving more reductions, until the funds are fully committed. The subsidies would go first to the cheapest reductions beyond the price signal, with constraints to ensure that subsidized reductions do not lock in technologies or infrastructure incompatible with deep decarbonization pathways.

Subsidized reductions from uncapped sources (e.g., agriculture, landfill methane emissions, emissions from refrigerants) would, of course, be additional to the cap. To ensure reductions made within the cap are additional, the fund administrator could buy back (at the auction price) and retire an allowance for each subsidized reduction achieved by a capped source. This ensures the subsidies do not simply free up an allowance to be used by someone else. The allowance budget for future auctions would also need to be reduced by the number of subsidized reductions already achieved.

By cost-effectively subsidizing additional reductions, a P&S system could help California achieve the 2050 target earlier, at no additional cost to emitters and consumers. Emitters spend the same amount they would under a conventional cap-and-trade approach, but under a P&S system, those expenditures are directed towards achieving reductions.**3. Meeting EJAC Recommendations and AB 197 Mandate**

The Environmental Justice Advisory Committee (EJAC) recommends, and AB 197 mandates, greater prioritization of GHG emission reductions at large stationary sources. ARB lists in the Discussion Draft three areas to evaluate in furtherance of this goal, but the cost-effective P&S system could be of great utility here. Large stationary sources covered under the Cap-and-Trade Program could be the ones invited to submit bids into the reverse auction for on-site reductions. Targeting subsidies at large stationary sources ensures the economy-wide signals of the cap and the allowance price are maintained, while at the same time spurring additional reductions (those with abatement costs beyond the allowance price) directly from these emitters. Special consideration could be given to emitters in or near low-income communities.

Again, CLPP appreciates this opportunity to provide feedback on the Discussion Draft of the 2030 Target Scoping Plan Update and urges California to provide even stronger climate leadership in the years ahead.