1) Regulate fossil fuels upstream
- Upstream is administratively easier and more comprehensive.
- Upstream can include transportation, a vital source of emissions.
- For electricity, upstream can avoid the debate between load-based and first-seller, and a future national system will likely be source-based (upstream).
- For transportation fuels, fuels are already tracked at the Terminal Rack.
- The price signal will provide feedback to most businesses, including reward for early action.
- Only fossil fuel producers and importers would be required to hold permits, simplifying reporting and compliance.

2) Auction 100% of the permits
- New York, Massachusetts, Vermont, and others are auctioning 100%.
- Revenues from auctioning may be used for public goods investments for further emission reductions, to fund administration and enforcement of the cap, and for per capita rebates or dividends.
- Previous cap and trade systems such as RECLAIM and the ETS have shown the problems with a giveaway.
- Auctioning avoids windfall profits and preferential treatment, and rewards early action.
- Every business is treated equally, and reduces the likelihood of permit overallocation.
- By contrast, grandfathering only benefits special interests seeking preferential treatment.

3) Per capita compensation to Californians
- Equity should be a major priority of a fair cap and trade system. The system must reduce disproportionate impacts on disadvantaged communities. A carbon cap resulting in higher fuel and electricity prices disproportionately impacts low-income households. Per capita ‘dividends’ or ‘shares’ rebate consumers, and especially help low-income households.
- A per capita approach is based on the principle that the sky is a commons we all share.

A per capita rebate/dividend/share:
- Reimburses consumers for increased prices
- Helps low-income communities and environmental justice concerns
- Avoids complicated or subjective set-asides and still accomplishes the same goal: proportionate impacts as we reduce emissions
- Can easily be adopted by other states or countries (it is scalable)
- Per capita framework may engage developing countries after the Kyoto Protocol expires in 2013.
- Alternate ways to reimburse consumers are: expanding the earned income tax credit, an earmarked rebate, or set-asides for low-income communities.

4) A price floor (through a carbon fee)
- The debate between carbon tax versus cap and trade can be resolved by using a carbon fee as a price floor in a cap and auction system.
- The floor reduces low-end permit price volatility, which allows businesses to make longer-term investments, and the cap continues to guarantee reduced emissions.
How to spend the revenues from an auction?
Revenues from an auction of emissions permits can be spent on public goods and consumer compensation. Everyone agrees that revenues can be used for the administration and enforcement of the cap. But not everyone agrees how the remainder should be divided between projects, research, and equity. Here are some arguments for and against each.

**Energy/Environment**

**PRO**
- Revenues are used to fund additional energy and environmental projects such as:
  - Energy efficiency, solar incentives
  - Public transit (trains, transit, infrastructure)
  - Research and development for new technology
  - Helps achieve climate protection goals
  - Only government can fund large infrastructure projects such as transit.

**CON**
- Large government expenditures should follow the normal budget and appropriations process.
- Transit can be funded by diverting highway funds.
- Solar can be funded by diverting oil subsidies.
- Trillions can be invested in green jobs and efficiency by ending the War in Iraq, and diverting military and homeland security expenditures.
- Carbon fees and “feebates” are an additional source of funding.
- Government has a mixed history of choosing technology winners (ethanol? the “Supercar?”), and the process is often co-opted by politically powerful lobbies such as ethanol, nuclear, or “clean coal.”
- Government purchasing can drive down prices of existing technologies, without the need to spend auction revenue.

**Consumer Compensation**

**PRO**
- Consumer compensation helps households deal with higher energy prices through a per capita dividend, rebate, or share.
- Protects consumers: Limiting carbon emissions will necessarily raise fossil fuel prices. These higher prices can be offset by distributing ‘dividends’ or ‘carbon shares.’
- Addresses regressivity: Failure to offset higher prices will harm the economy and low-income households particularly.
- Avoids the “pork barrel”: Returning money to consumers avoids funding pet projects, or questionable projects (nuclear, ethanol)
- Makes carbon cap politically feasible: A dividend could prevent a consumer backlash at high fuel and energy prices that would otherwise allow political opportunists to undermine the program.

**CON**
- Q: What if people spend their Dividend on Hummers or vacations which increase emissions? Shouldn’t all revenues go toward reducing emissions?
- A: Once a cap is in place, it doesn’t matter how people spend their money, because the cap means that the emissions target is still met.

**Conclusion:** Auction revenues should be used for consumer compensation. Investments in energy efficiency, transit, green jobs, R&D, renewable energy, and more may be funded by carbon fees and government budget priorities.
Carbon Share is a type of allocation where green-house gas emissions permits under the cap are distributed to Californians annually on a per capita basis. Carbon Share is based on the idea that the rights to use the atmosphere belong to the people, not to emitters or the government.

Carbon Share compensates consumers for the price increases they will face under an emissions cap. Carbon Share utilizes a private exchange, but the end result is equivalent to an auction: companies must purchase the permits, and the revenues are used for public goods or citizen compensation.

Carbon Share is similar to a dividend sent to consumers after permits are auctioned to companies. The main difference is that the shares are denominated in CO2, and cashed in banks similar to exchanging foreign currency. Companies buy the permit on a private market, instead of a state-run auction.

Low-emitting individuals will come out ahead at the end of the year, but high-emitting individuals will pay more than they receive.

Carbon Share has an environmental justice component. The per capita aspect helps low-income consumers, since they spend a greater portion of their income on fuel and electricity.

Carbon Share is one of several potential public trust allocation methods in designing a carbon market for California. It can work alongside an auction. Consumers may be given a choice on their tax form to receive their Carbon Entitlement as a Share or as a cash dividend. The Share would allow them to participate in the private carbon market.

For more information, check www.carbonshare.org

This fact sheet is part of the series available at www.carbonshare.org • Carbon Share • (707)529-4620 • mike@carbonshare.org
Cap and Dividend

Cap and Dividend limits total carbon emissions and returns auction revenue to consumers. The dividend protects consumers from price increases and preserves political support for cutting emissions.

Companies buy permits from government.

Higher fuel prices encourage conservation and renewables.

Agency sends dividend to consumers.

Which approach will better achieve the goals of AB32?

Cap emissions, auction allowances and return auction revenue to consumers as a Dividend OR

- Grandfathering and “phasing in” auctioning
- Loopholes and exemptions
- Offsets and “credits”
- Omitting the transportation sector
- Ignoring low-income communities
- Protecting corporations but not the middle class
- Spending auction revenue on pet projects or private-sector R&D
- Safety valve and price ceiling

Find out more about Cap and Dividend at www.climateprotectioncampaign.org and www.capanddividend.org

This fact sheet is part of the series available at www.carbonshare.org • Carbon Share • (707)529-4620 • mike@carbonshare.org
How would you like your Climate Allocation: Dividend, Tax Credit, or Share?

California’s cap on GHGs will create valuable emissions permits, but prices may rise. The resulting windfall belongs to all Californians, equally. An equal per capita rebate can be provided to consumers through a check box on your state tax form.

This model could work at the Federal level too. Funds are held in a Trust, separate from the General Fund. The cash dividend compensates consumers from revenues from auctioning permits to upstream companies. The tax rebate is the easiest to administer. The Share may be sold to companies via banks or brokerages, and allows financially savvy individuals to participate in the carbon market directly.

Your choice:

**you receive:**
Cash Dividends/Tax Cut

Deposit the check in your bank account.

**or**

**you receive:**
A Carbon Share

Deposit the share in your brokerage account to sell later on private market.

An Auction/Dividend and Carbon Share can co-exist, and parallel markets may benefit both. Either way, low-income and low-emitting consumers come out ahead. High emitters do not. Consumer compensation can make climate protection feasible and popular in California.

This fact sheet is part of the series available at www.carbonshare.org • Carbon Share • (707)529-4620 • mike@carbonshare.org