

# Learning from the European Trading System:

By Mike Sandler (707) 529-4620 msandler@pair.com

## Problems with the ETS:

## What California can do to avoid ETS problems here:

A) **“Grandfathering”**: In the ETS, each national government allocates its emissions to its largest emitters based on existing emissions. Some governments could not resist the temptation to over-allocate to large emitters.

Make large emitters pay for emissions permits (known as **“auctioning”**). The more a firm emits, the more it pays.

B) **Subsidies to large firms**: Large energy users are given permits free, but smaller users are not. Big users are given a subsidy, an unfair advantage.

Auctioning avoids subjective judgment or arbitrary criteria. Regulating firms as far “upstream” as possible- fossil fuel producers or importers- makes it less subjective.

C) **No price protection for Consumers**: Price increases are passed along to consumers with no buffer.

A consumer entitlement (allocation/dividend) can be a cushion against price increases.

D) **ETS covers only 45% of EU emissions**: Trading limited to six sectors: energy production, iron and steel, cement, glass, ceramics, and paper and pulp. Permits are allocated to companies downstream, instead of the permits being required as far upstream as possible.

Instead of sector coverage, regulate fossil fuel in-state production and importation as far upstream as possible.

E) **Short time horizon**: 3 year time horizon does not allow firms to make long term investments.

CA’s focus on Gov’s 2020 goal is good.

G) **No Incentive to close dirty plants**: Permits are withdrawn from companies when they close dirty plants. This provides an incentive to keep dirty plants open (due to “grandfathering”).

In an auction setting, firms only buy as many permits as they need. The incentive to reduce emissions equals the unit cost of the permit.

H) **Unlimited CDM**: If unlimited new permits can be imported through the Kyoto Protocol’s CDM or JI, the price of the permits is unlikely to rise, and the incentive to change behavior will not increase.

Limit the amount of imported credits.

I) **Each firm needs GHG admin**: Administration and compliance costs are high to measure emissions from regulated plants.

Measurement would be tied to fossil fuel use, which is already measured.

J) **ETS gives the global commons – the atmosphere - to rich large companies.**

This is perhaps the worst problem. Dividend/allocation should go to all citizens equally.

# Important Decisions in a Future Cap and Trade System

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## *1) Who owns the Sky?*

The people own the sky, equally on a per capita basis. This property right will become increasingly valuable over time. Corporations which pollute the sky should compensate the owners for the “use.” The government is not necessarily a proxy for the people, since the government may have different priorities for what to do with the proceeds.

## *2) What is the difference between allocating proceeds of a Sky Auction directly to people, and the State “handling” it on the people’s behalf? If the government manages an account, would the money be better used than if given to individuals?*

In favor of State management of the Sky Trust funds: State funds could be specified to be spent only on energy efficiency, a public relations campaign (like the anti-tobacco campaign), and/or renewable energy procurement. Individuals, by contrast, might spend the money from their allocation on high carbon purchases and activities (ex: air travel, Hummers, etc).

In favor of Individual management: Once owners of the Commons have been compensated, it should be up to them to decide how to use it. Over time, the allocation could become a major source of income for low-income people, and even a 21<sup>st</sup> century safety net. Providing “food stamps” or “low-carbon stamps” could be implemented later if individual choices are inhibiting the needed carbon reductions. Would State management be the same as a Carbon CALPERS (state managed pension fund)? We may trust California to act on its constituents behalf, but when this model is moved to Washington, DC, the proceeds could be diverted to other priorities (perhaps defense, which is already over 50% of the Federal Budget). Recent governments have been willing to “raid” special funds such as Social Security, Transportation funds, or Pension funds for their own short term priorities. Over the past 6 years, Washington DC has not proven itself to be reliable in safeguarding public trust resources or accelerating the transition to a low-carbon economy. The CA program choice will be a template for others.

## *3) Why per capita allocation?*

By allocating to individuals, the State avoids the most intense political pressures. Each company will want “special treatment.” A per capita distribution to individual citizens avoids favoritism, and sends proceeds to the owners of the commons.

## *4) Is allocating directly to people the same as a tax refund?*

No. The poorest people may not earn enough to qualify to pay income taxes. These are people with no checking account, who use check cashing services. These are the people that this income could be most valuable to. If middle class people choose to view their carbon allocation as a tax rebate, that is their choice.

## *5) Would the market be “short” if people did not “cash” their entitlements?*

There should be a phase-in period of several years, similar to the Euro in the EU. Entitlements could have short expiration dates to encourage quick turnover, and be staggered throughout the year as with car registration, etc.

6) *Who should be in charge of the auction of GHG emissions?*

The auction could be run by the government, or it could be run by banks and brokers through a licensed independent exchange. In a private sector approach, the government would set up rules for fairness and have oversight, but not run the market. I have not yet approached banks about this type of arrangement. Banks should be consulted about their potential involvement.

7) *How are Individual Emissions Entitlements calculated?* Here's an example:

|                                                                                                         | 1990       | 2000       | 2010 <sup>1</sup> | 2020       |
|---------------------------------------------------------------------------------------------------------|------------|------------|-------------------|------------|
| Statewide Net Co2 Equiv. Emissions <sup>2</sup> (MMTCo2E, includes electricity imports and minus sinks) | 416.7      | 469.6      | 469.6             | 416.7      |
| CA State population over 18 (assumes 74% over 18, 26% under) <sup>3</sup>                               | 22,022,415 | 25,065,019 | 28,169,679        | 31,232,989 |
| Tons CO2E divided by population over 18                                                                 | 18.9       | 18.7       | 16.67             | 13.34      |
| \$ US per entitlement (at \$15/ton CO2, assumes no change in price of carbon over time) <sup>4</sup>    | \$283.50   | \$280.50   | \$250.05          | \$200.10   |

Note: 1990 and 2000 entitlements are for illustrative purposes only. The tonnage per entitlement decreases over time since carbon in the economy decreases while population increases. The price per ton of carbon would decrease if industry were able to decrease emissions ahead of the cap. Or, it could increase if demand for entitlements exceeded supply.

9) *Who else is talking about Individual Emissions Entitlements?*

The Dublin, Ireland-based Foundation for the Economics of Sustainability ([www.feasta.org](http://www.feasta.org)) has called this idea “Cap and Share” and they use this graphic to illustrate the process of emissions entitlement distribution. They are discussing these ideas with decision makers participating in the evaluation of the ETS.



<sup>1</sup> CA Governor’s GHG reduction targets: a reduction of GHG emissions to 2000 levels by 2010; a reduction of GHG emissions to 1990 levels by 2020; and a reduction of GHG emissions to 80% below 1990 levels by 2050.

<sup>2</sup> CA State GHG inventory page 22 <http://www.energy.ca.gov/2005publications/CEC-600-2005-025/CEC-600-2005-025.PDF>

<sup>3</sup> US Census: 1990, 2000 and projected numbers for 2010 and 2020

<sup>4</sup> [www.pointcarbon.com](http://www.pointcarbon.com). Price to the nearest dollar on October 25, 2006.