Issue Analysis[1]: The Timing of Information Release in the Greenhouse Gas Emissions Cap-and-Trade Market

by

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The foundation of a cap and trade market is the concept that market participants will recognize a price for GHG emissions and will incorporate that price in making decisions about input choices, output quantities, and price setting for their own products. To respond efficiently, however, firms need to have a credible idea of the cost that is associated with the GHG allowance liability that they incur. Further, market transparency makes attempts at manipulation of prices more difficult and more costly. In this document we discuss two related aspects of information policy: the timing of information releases and the details of what information is released.

Information Provided to the Market:

The current, and future, outlooks for the supply of and demand for allowances are the basic fundamental drivers of allowances prices. A liquid and transparent market would therefore ideally have timely, accurate information about both emissions levels as well as some sense as to the holdings of firms. One must recognize that, when it comes to information availability, there is a potential tension between the public interest and the proprietary interests of a given firm. While market efficiency would benefit from full transparency of holdings, many market participants have articulated concerns that disclosure of a large short position would put them into a disadvantageous negotiating position. An important consideration is the ability (or lack thereof) to buy needed allowances through a more anonymous platform, such as the quarterly allowance auction, as opposed to through bilateral transactions where the counter-parties know exactly whom they are transacting with. One concern is that in bilateral settings potential counter parties could try to extract higher prices from firms they know are highly in need of additional allowances.

Conversely, it is generally accepted that transparency makes it more difficult for firms to acquire dominant positions in a market. If the market is aware of that an individual or firm is buying up a large share of available allowances, sellers are likely to demand higher prices, making the attempt at market dominance more costly. This is the logic behind rules that require

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[1] The Emissions Market Assessment Committee (EMAC) was formed to provide independent analysis and advice to the California Air Resources Board (ARB) and staff on implementation of California's greenhouse gas (GHG) cap-and-trade (C&T) market. One issue that has a strong influence on the overall performance of the market is the availability of accurate information on which forecasts of allowance supply and demand can be based. Issue analyses reflect the views of the EMAC at the time they are released. They are written in order to inform stakeholders of the EMAC's views in a timely manner and to invite feedback from interested parties. The EMAC will update its views as new information arises and circumstances change.

disclosure of dominant positions. For example, any individual or firm that acquires more than 5% of equities in a publicly traded stock is required by the Securities and Exchange Commission to disclose their position.

The ARB originally proposed restricting holding account information but providing full firm-level detail on the allowance balances held in compliance accounts.[2] The proposal to make full firm-level detail on compliance account balances is being reconsidered. ARB is exploring sector-level aggregation with quarterly updates. We are concerned that too high a level of aggregation would harm transparency and make the acquisition of a dominant position less costly, while providing little public benefit.

While we continue to believe that there are public benefits to full disclosure of account information, we do understand the concerns of stakeholders who oppose this. We believe that the main concern, having to pay high prices if one is known to be short, can be mitigated while also providing the market timely information about any attempts to acquire large long positions. We propose consideration of rules along one of the following lines.

1. Disclosure of the holdings of specific firms *only* when their net long position exceeds a certain threshold, such as 110% of their forecasted emissions, or a percentage of total available emissions. This rule would both keep firms who are short anonymous and disclose to the market any firms attempting to acquire large long positions. We view this as consistent with the spirit of other similar rules, such as the S.E.C. rule described above.

2. Disclosure of the *distribution* of net-holdings within a given industry. For example, in addition to reporting the aggregate industry wide balance for the power sector, ARB would report the number of firms with positions in different categories. These categories could be a number of "bins" depicting the degree to which firms are long or short relative to their expected emissions.

We also note that a strengthening of the auction market would also help assuage many of the concerns with information disclosure. This is one reason to explore the potential for more frequent and two-sided auctions that is discussed in a related paper. To the extent that firms have frequent access to deep and liquid "anonymous" market, counterparties have limited ability to take advantage of the knowledge that individual firms may be short of allowances.

Timing of Information Release:

The other important dimension of information policy is the timeliness of the release of that information. Information releases that cause abrupt and large price movements reduce the ability of market participants to make reliable business plans that incorporate the cost of incurring GHG allowance liability.

[2] See the white paper on holding limits for descriptions of the account types.

The EMAC is concerned that information flow in the California GHG market could potentially cause sudden and large price changes. Verified emission inventory data will be released by the ARB annually in early November of each year covering the previous calendar year. Thus, for instance, the first official data on emissions by covered entities during 2013 will occur in September of 2014. Infrequent and lagged data release could potentially lead to large surprises and market readjustments. But this is likely to occur only if the data released differ markedly from the expectations of market participants.

Thus, the question is how well market participants will be able to forecast official ARB data using data from other sources that release information more frequently. The California Board of Equalization releases fuel sales in the state on a quarterly basis, though with about a 3-month lag. The California ISO releases daily the shares of power in the ISO control area coming from each type of generation, plus the share coming from imports. It does not release information indicating the GHG content of imported power. The Energy Information Administration also publishes monthly data on Natural Gas and other fuels, as well as Electricity Consumption with some lag.

The EMAC seeks comment on how well market participants are likely to be able to foresee changes in the rate of GHG emissions from different sources and the potential extent to which the annual inventory report may deviate from the expectations of market participants. If the deviation is potentially significant, are there actions that the ARB might take to mitigate such information shocks?

One possible policy response would be for the ARB to release preliminary aggregate emissions figure prior to verification of each company-level account. The data would be subject to later revision, but they might help reduce the potential volatility from a one-time information release.

A more resource-intensive policy response would be to increase the frequency of data submission and account verification so that the ARB could release at least aggregate figures -- perhaps preliminary and subject to later revision -- on a quarterly or semi-annual basis.