RICHARD DOMALESKI URGES A LOOK BENEATH THE FEDERAL CAP-AND-TRADE DEBATE TO UNDERSTAND AMERICAN CARBON PROGRESS

Auctions Rising

The world can be forgiven for not understanding America's position on capping and trading carbon emissions. Against the backdrop of global recession, so-called 'climategate', modest Copenhagen climate summit results and a protracted stalemate in Congress over healthcare, which has frustrated the electorate and threatened the once bright prospects of US cap-and-trade, a major near-term American policy move in carbon may appear, at first glance, unlikely.

But policy and practice are two different things. While efficiencies are created when the two work in tandem, it would be a mistake to underestimate the impact and momentum of US greening efforts that are occurring in lieu of an overarching cap-and-trade programme. When surveyed in their entirety, these powerful pockets of innovation and progress, achieved at individual company, state, regional and even intra-Federal agency levels, show where America is really heading in the emission reduction fight: forward.

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Every day, somewhere in America, a green transaction is taking place. But instead of revisiting experiments in early voluntary trading mechanisms, let's look at where the growing action is: commodity auctions. World Energy is in these markets every day and we're seeing green become a dominant presence in US business thinking about energy procurement and efficiency initiatives.

First, demand for green is great. In the last six months alone, we have facilitated numerous transactions on behalf of commercial and industrial companies and government entities looking to green their energy portfolios. And how are they doing this? By going into the market to buy traditional 'brown' energy (that is to say, energy generated from polluting sources) and leveraging the advantages and buying power the auction process creates for them to save money and also procure renewables. Auction dynamics have shown that energy suppliers are only too happy to bring significant amounts of green into their offer, at little or no premium, in hopes of winning power contracts.

General Dynamics Land Systems, a Michigan-based manufacturer, illustrates the point. It used the auction process to procure electricity and green power for its division headquarters and other facilities, leveraging the efficiencies of auctioning to extract the best price from suppliers and use the proceeds to buy 25 per cent green power in the form of renewable energy certificates (RECs). These types of stories don't make headlines, but they do signal a shift towards green in the energy decision-making of corporate America. Little surprise then that more than 80 major US companies and NGOs recently banded together in an advertisement in The Wall Street Journal calling for Congress to act quickly and decisively on climate change.

Along with green power procurement, another new wave in American carbon emission reduction is the rise of 'demand response'. Demand response, or 'DR', is a programme driven by grid operators that pays end customers for reducing energy consumption during times of peak demand. These programmes are catching fire across the country, with the curtailment market expected to grow to $20 billion by 2020. They are important, because they enable grid operators to reward energy conservation while alleviating the need to build new fossil-fuel consuming power plants, a big win for the environment.

While demand response may not yet have become part

of the carbon market vernacular, companies are seizing on this commodity as a new path to green. And, again, as in traditional energy and environmental markets, auctions can be an important way to create market efficiencies, including liquidity, transparency and price discovery, that benefit all DR market participants and accelerate growth.

Grassroots actions by companies combined with new emerging markets and mechanisms for advancing green highlight the health of climate action in the US. So, too, do the US regional initiatives that have fast-tracked carbon cap-and-trade in advance of US policy, and none more so than the Regional Greenhouse Gas Initiative (RGGI).

The 10 Northeast/Mid-Atlantic states that comprise RGGI have established the first market-based system for reducing greenhouse gases (GHGs) in the US, spurring serious consideration of auction-based cap-and-trade from California to Canberra.

From our position as RGGI's auction manager – supporting RGGI states' administration of this programme as a contractor to RGGI, Inc – we see clearly the effect of developing fair, transparent, highly-functioning markets that facilitate bidder participation and create value. To date, the RGGI states have auctioned more than 170 million allowances, yielding more than $490 million for reinvestment in energy efficiency, renewable energy and other programmes that benefit energy consumers and create green jobs.

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RGGI sets an example for a number of design elements in a cap-and-trade system. In this article, we have focused on the one we are closest to: auctioning. RGGI has shown the US and the rest of the world that auctioning carbon allowances works. Large emitters can be brought together to bid in fair, tightly-structured and highly-transparent events that result in market-based pricing and create myriad benefits for multiple stakeholders.

RGGI's auction-based design draws from lessons learned in the EU ETS, which opted to give away most of its allowances, inadvertently creating windfall profits for polluters. RGGI changed this paradigm, using the auction process to spur reinvestment in green initiatives without dramatically impacting energy rates for consumers.

So where does that leave us? As this article goes to press, alliances of US senators are reportedly testing energy and carbon reduction scenarios among their peers for consensus and a possible vote. With this in mind, here are three potential outcomes, each with benefits to the environment and which advance carbon trading:

Scenario 1: A Federal bill passes: While the US political climate has shifted dramatically since President Barack Obama's inauguration, auction-based cap-and-trade is still actively shaping US leaders' visions for America's low-carbon future. President Obama has backed auctioning since his primary campaign; the Waxman-Markey bill codified auction-based cap-and-trade in a House of Representatives approved measure; and the framework recently proposed by Senators John Kerry (Democrat-Massachusetts), Lindsey Graham (Republican-South Carolina) and Joe Lieberman (Independent-Connecticut) to create a federal pollution control system calls for carbon market transparency, investment in clean technology and consumer protections, all hallmarks of RGGI and its auction process.

Auctions also play a prominent role in the latest incarnation of US cap-and-trade thinking called 'cap and dividend'. The carbon limits and energy for America's renewal (Clear) act proposed by Maria Cantwell (D-Washington) and Susan Collins (R-Maine) would auction permits to fossil-fuel producers and importers, returning the proceeds directly to American citizens as non-taxable income.

Scenario 2: An Environmental Protection Agency (EPA) climate regime begins: While the national debate over cap-and-trade has been unfolding, the US EPA has articulated its authority to regulate GHG emissions under the clean air act.

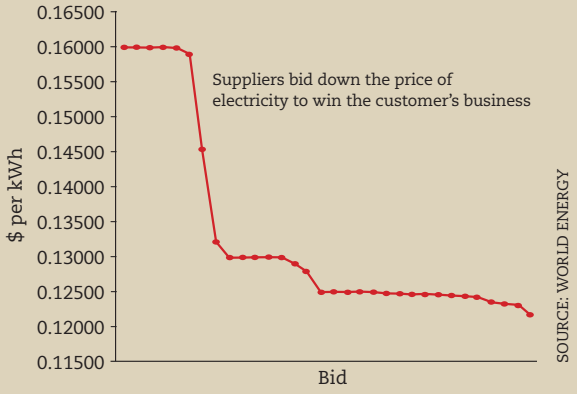
Some see these moves helping the passage of a US national bill. The common wisdom is that the business sector, including energy, would rather broker a carbon reduction deal through Congress than hand over the

Auction ABCs

Just as carbon trading has developed its own robust, if somewhat opaque, lexicon – think of the 'alphabet soup' of commodities and mechanisms we encounter daily, from CERs, VERs, AAUs and RECs to CDM, REDD, EU ETS and UNFCCC – the world of online energy and environmental commodities auctions has its own 'insider' language that becomes more user friendly once explained. Following are some key terms to navigate the world of these commodities auctions:

- English auction: This is the type of auction most familiar to the widest audience. In an English auction, typical of a Sotheby's auction event, bidders compete in an open forum, driving the price of the bid upon item in a real-time competition.
- Dutch auction: This auction type is marked by the auction administrator changing the bid price of an item – typically lowering it – until it gets a bid. Once a bid is received, the auction ends, and the item is awarded to the bidder.
- Sealed auction: An event where bids are submitted privately and only viewed by the customer or deciding body. These events are the opposite of the English auctions.
- Forward auction: In a forward auction, bids drive the value of the bid upon item up.
- Reverse auction: In a reverse auction, bids drive the value of the bid upon item down (see figure).
- Multiple unit auction: Auction participants in a multiple unit event can bid on more than one parameter. So, rather than simply bidding on price, they may also bid on quantity. For example, a company could place a bid for 5,000 allowances at $5 and 10,000 at $4.50.
- Anglo-Dutch auction: This type of auction combines the openness of the English system and the tension and uncertainty of the Dutch format. In an Anglo-Dutch auction, the time sensitivity of a hard stop yields a 'last bid blind' effect in the auction's waning seconds to drive 'all in' bids.
- Post and respond auction: Essentially a sealed bid auction conducted over an extended time, this type of online pricing event allows customers to specify terms they are seeking, for example, a certain price and quantity. Market participants can respond with offers when business conditions best suit them.

Example of a reverse auction



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regulatory reigns to the EPA. However, if a national bill fails to pass and the EPA does administer a top-down GHG regulatory regime, it could preside over its own auction-based cap-and-trade system. Grist's David Roberts notes such an EPA programme "would not have the same federal mandates as a legislative system"; instead it "would effectively set out overall targets and allow states to figure out how to meet those targets." In such a scheme, state and regional initiatives, such as RGGI, Western Climate Initiative (WCI) and Midwestern Greenhouse Gas Accord would likely continue to flourish.

Scenario 3: Cap-and-trade goes local, regional programmes thrive: We've discussed RGGI's impact on the global and US national cap-and-trade conversation, but its influence on other US regional programmes is also evident. In lieu of federal cap-and-trade legislation, look for other regional GHG reduction initiatives, such as the WCI, comprised of western US states and Canadian provinces, to pick up steam.

The desire to combat carbon pollution through cap-and-trade also extends to individual states, with California Air Resources Board chair Mary Nichols recently confirming California's intent to auction pollution permits as part of its own state run programme.

US policy decisions on GHG reductions – and the mechanisms to enact them – will no doubt have worldwide ramifications. That said, the genie is already out of the bottle. Independent of federal action, America is actively greening itself on many fronts, and is not looking back. Along the way, the US is innovating, and not just in expected ways, such as developing advanced technologies, but in practices and processes – such as auction-based cap-and-trade – that could prove to be one of the country's most lasting carbon market legacies. ●

The opinions expressed in this article are solely those of World Energy and should not be interpreted to reflect those of any government or private entity, nor do they draw on any privileged client information.

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