

## THE US: PREPARING FOR TRADING

The final rule for the Clean Power Plan opens the door for market-based trading in the US. Tom Lawler and Cameron Prell take a closer look

In late 2015, the US took what could ultimately become the biggest step in its history toward establishing regional and national carbon markets. The reason for the qualifier is that a number more steps will need to be taken by US states, each acting independently, before the statement can be true. Optimism abounds that states will choose a path to achieve newly mandated CO<sub>2</sub> reductions from the power sector by using some form of emissions trading.

To explain, on 23 October, 2015, the US Government published Environmental Protection Agency (EPA) rules to regulate CO<sub>2</sub> emissions from existing fossil fuel-fired power plants under Section 111(d) of the Clean Air Act. The rules – informally referred to as the Clean Power Plan (CPP) – establish both emission reduction targets and guidelines for state enforcement.

By fall of 2016, a blink of an eye in state political terms, each state is now required to devise and submit for EPA approval a compliance plan based on its own circumstance that is consistent with the EPA guidelines, and sets performance standards to achieve its state-specific target reductions between 2022 and 2030. The Clean Power Plan strongly encourages emissions trading throughout the rules as a cost-effective compliance option available to states, providing several market infrastructure and design parameters to be considered – including collaborating or linking with other states to develop regional platforms.

The EPA gives states flexibility to design a trading system using instruments that are either mass-based (short tons of CO<sub>2</sub>-equivalent) or rate-based (average tonnes of CO<sub>2</sub> per megawatt hour of energy produced).

Under a mass-based programme, states would establish a cap-and-trade system similar to those in existence around the world, allocating emission allowances to covered entities based on a total emissions budget calculation, net of any designated set-asides for targets reductions. Under a rate-based programme, states would establish some form of baseline-and-credit system, whereby Emission Rate Credits (ERCs) would be generated by covered entities performing underneath their allotted baseline. Other zero-emitting resources deemed eligible (eg, clean energy resources) would also generate and be able to sell ERCs to covered entities operating above their respective cap. Offset credits are not included or contemplated under either approach.

However, states will still have the option to choose *not* to pursue emissions trading programmes – a point that cannot be understated here. Depending on the relative stringency of a given state's emission reduction obligation under the CPP, the state government will have flexibility to achieve compliance in any number of other means (eg, command-and-control emissions performance obligations, power plant retirements, clean energy portfolio standards, energy efficiency improvements, etc). Moreover, some states could choose a form of custom “state measures” compliance plans that will include partial or “opt-in” use of emissions trading.

From an efficiency and lowest cost of emissions abatement perspective, however, preliminary evidence favours the conclusion that many states will choose to employ trading – specifically, mass-based trading under a cap-and-trade system.

To foment this outcome, the EPA included in the final rules a pre-packaged solution comprising a set of simplified “trading-ready” standards. A state that chooses this approach would be able to wholesale adopt standardised terms, methodologies and criteria to avoid haggling over competing political interests.

States that employ the pre-packaged trading-ready approach will be required to utilise the same commodities, the same metrics, and the same methodologies and criteria as all other states that also choose to be trading-ready.

Those states that forecast being long on emissions reductions over the eight-year compliance period will naturally have economic incentive to trade with states that will be short, and vice versa. The genius of the Clean Power Plan therefore is that it provides states the ability to link with other states through the trading-ready vehicle.

The device was necessary, given the constraints of the existing Clean Air Act. The EPA does not have the regulatory authority to mandate a national cap-and-trade system absent future federal legislation. The best the agency could arguably do is to support broad-based trading by appealing to the economic interests of states.

HOPES ARE HIGH THAT THE CLEAN POWER PLAN WILL LEAD TO THE CREATION OF CARBON MARKETS FOR THE US POWER SECTOR

The EPA's strategy is consistent with how US energy markets operate. There are 48 different energy markets among the contiguous states, some deregulated and some monopolistic, but public utilities that own the regulated power plants often operate in more than one state. The utilities themselves therefore have vested interests in ensuring that states employ common compliance approaches. This highlights one of the most difficult issues state governments will need to resolve. Each state will be affected by how the adjacent and surrounding states choose to comply with the CPP, and each state will have little or no actual legal authority to affect other state decisions – it will only have the ability to coordinate regional solutions.

A regional mass-based programme in this regard may be easier to manage for most regional platforms, both because mass-based programmes already exist and are familiar (eg, the Regional Greenhouse Gas Initiative in the northeastern US, the California carbon market), and because the trading infrastructure and deployment mechanisms are much more streamlined than a rate-based programme might be. Regions that utilise rate-based programmes would have to also agree to harmonise emissions measurement and verification standards if the states were seeking to credit or incentivise clean energy or energy efficiency. This could require additional layers of regulatory enforcement that may encumber or add costs to compliance. Under a mass-based programme, incentivised eligible resources, like renewable energy or natural gas, would be more easily entitled to state

## FROM AN EFFICIENCY AND COST PERSPECTIVE, PRELIMINARY EVIDENCE FAVOURS TRADING

allowance awards based on a more upfront distribution method, and all states would have greater transparency of the liquidity of the regional market over time.

Should states choose a trading programme, it will still have to consider a host of carbon market design related issues, including:

- Statewide emissions budgets during compliance periods
- Allocation and distribution mechanisms (auctioning vs. free allocation)
- Cost impacts on covered entities and end-use consumers;
- Whether a distribution scheme, and subsequent market trading, are compatible or consistent with the state's power market(s); and,
- How the overall trading programme could alter or transform market behaviour in power generation, transmission and consumption.

Central considerations will be how covered entities are able to mitigate compliance costs associated with the mandated scarcity, and how the designated recipients of allowances/ERCs are able to use the tradable commodities and receive and benefit from their associated value. In this way, the market design experience and expertise of IETA members will have direct relevance to states evaluating CPP compliance – how problems were identified and addressed under the EU ETS or the California ETS, most pointedly.

Hopes are high that the Clean Power Plan will lead to the creation of carbon markets for the US power sector, yet there are a number of contingencies and obstacles that will be encountered along the way. Most notably, more than half of the US states and several large industry groups have already challenged the legality of the CPP – challenges which will likely end up before the US Supreme Court in a few years' time. Between now and then, though, states have their marching orders. The EPA has opened several potential doors for carbon market development that states can walk through, and in some instances run through. Whether a regional or national carbon market develops will depend on how many states choose the same door.

**Tom Lawler** is Principal, Lawler Strategies. Based in Washington, DC, he previously served as chief policy advisor on energy and environmental issues for Senator Thomas R. Carper (D-DE) and managed the Subcommittee on Clean Air and Nuclear Safety for the Environment and Public Works Committee. He is also IETA's Washington, DC representative.

**Cameron Prell** is a counsel in the Energy Group in Crowell & Moring's Washington, DC office. His practice focuses on the business of climate change and the convergence of energy and environmental law and finance

