Articles

"Offsetting the Invisible Hand"

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Introduction

The proposed creation and treatment of GHG Offsets represents a microcosm of some of the more problematic issues presented by the overall cap and trade program envisioned by Waxman-Markey. Given the likelihood that these provisions will at least receive some modification in any legislation that is enacted, it is useful to consider these issues generically.

Offsets are essential to the workability of the GHG trading system. It has been estimated that they could account for up to 2 billion tons of total emissions reductions under the entire cap. In 2012, that could mean that up to 15% of the emissions cut could be made into offsets. It is estimated that the figure could rise by 2050 to 33%. Offsets are thus one of the key expansion joints to preserve what could otherwise be a very strained, and hence a more potentially costly, cap and trade system.

The business of offsets manufacture and trade is also one of the two major emergent financial industries based solely on environmental legal property rights. Its roots are first in the CDM process of Kyoto, whose policy goals were as much international policy as the inherent requirements for the operation of a cap and trade system, and second, in the current pale American cousin to Kyoto--the voluntary market--whose motivations were both societal betterment, on the one hand, and shrewd commercial cap and trade pre-compliance anticipation, on the other. All of these motivations are bundled in the proposed new legislative treatment of offsets. Fortunately, from a management execution viewpoint, its implementation will have benefited from experiences in product design and financial application which have already occurred. The functional success of an offset program ultimately is based on the otherwise-effective operation of the trading markets: the valuation of the offset currency by these markets is meant to be compared by statutorily covered parties with the price of buying auctioned allowances or undertaking other mitigation activities. Offsets thereby constitute a thermostat to control the overall costs of reducing greenhouse gases.

The farsighted have made bets on the shape of this market and therefore of the offsets market. They are scrambling to assure through the legislative process the validity of the bets already made. The players in this transition are imminently faced with the potentially lucrative challenge of moving from the self defining world of the US voluntary markets to the more highly structured Federal systemic one and, on its heels, the international successor to Kyoto. There could be important secondary ramifications arising from the success of the emergent offset market, notably credit support for the structured project finance of offset producing projects.

Another ramification is likely to be the development of innovative transactional risk management instruments and possibly the introduction of new approaches to risk aggregation. The overall, therefore asset-backed, structured finance could enhance the significance of offsets in a new statutory system. These results could be compounded if, as Waxman-Markey contemplates, offset credits nearly doubles to 60% in the next 40 years.

The question is: will these potential benefits be thwarted by potential flaws of the offset regime or in the cap and trade regime to which it is tied? What may be commercially and financially done can still be hindered by what remains to be administratively and politically worked out.

Possible Flaws

These flaws fall into four generic important categories:

Dispersal of Administrative Responsibility. The detailed rules defining the eligible offset opportunities to facilitate statutory compliance remain yet to be written in great detail. It is important to recognize that responsibility for the overall rules are bifurcated between two bureaucracies with parallel responsibilities but different constituencies, US EPA (Waxman-Markey

Title III) and USDA (Title V). A newly created entity, the Offsets Integrity Advisory Board, is to be established by EPA to provide supplementary advice.

Also bifurcated is the oversight of the trading respectively of allowance/offsets on the one hand, over which the FERC will have jurisdiction and the trading of the derivatives of them, based on which will be the CFTCs bailiwick. Combined with the other factors discussed below, the uncertainty and implementation delay resulting from administrative dispersion (and in some cases, lack of administrative experience) certainly are not likely to result readily in the operation of markets which give useful price signals to the emitters decision makers.

Fragmentation of Green Programs. This problem could be exacerbated by the fact that the cap and trade system must operate in a non-parallel universe, with the new national Combined Efficiency and Renewable Energy System (Title V) which is designed to incentivize the utility industry to modify its generation mix, by requiring compliance by each state with minimum targets for renewable energy and energy efficiency savings. The full interplay of relative renewables and efficiency savings requirements is still at issue. Resident electric generators have to contribute to meeting these requirements by purchasing Renewable Energy Credits (and energy efficiency savings credits), and/or by development of their own generation, or by making statutorily-defined Alternative Compliance Payments. There is only one administrative agency slated for defining REC regulations and providing trading oversight, the FERC (with some state interactions in tighter requirements setting).

But the issues of dispersal of administrative responsibility is present. Waxman-Markey offers relatively few cross-overs between the operation of FERC jurisdiction over RECs and EPAs responsibilities with respect to offsets. There may be overlaps between the list of project types eligible to produce offsets and that for renewable generation sources which can produce RECs. This overlap is illustrated by one of the few examples of tortuous line-drawing which actually exists in the statute. Qualified waste-to-energy is to be deemed eligible to earn RECs credits to the extent of the biogenic (non-fossil fuel) component of municipal solid waste and certain other waste streams. However, this may only be the case if the FERC and the EPA determine that the life cycle GHG emissions from use of waste-to-energy facilities is lower than the emissions from the likely alternative disposal scenario.

For parties subject to compliance requirements by two sets of statutory mandates, there is a decision-making tension between the need to invest in direct offset sources to comply with Title III, or essentially to RECs for Title I purposes, which have limited Title III value because the carbon benefits are only indirect. Simply put--and renewables proponents should mark this well--buying green power doesnt necessarily provide GHG offsets. The ambiguity in this area may distort the orderly development of the energy markets; it may even have the unintended result of not doing as much for climate change as is desirable.

Intellectual confusion and disputes exist in some quarters as to the mutually exclusive nature of the availability of offsets on the one hand and RECs on the other. The statutory Renewable Electricity Credit definition, one megawatt hour of renewable electricity, leaves open the question of whether there exist environmental attributes, i.e., carbon reduction characteristics attributes of RECs, which some voluntary accreditation systems would purport to make a separately tradable source of green mitigation benefits. Most utility standard contracts are emphatic about appropriating to the buyer of RECs all of the environmental benefits which may accompany RECs production. Most commentators have drawn a bright line: RECs cannot be double counted and neither can carbon credits. The same act of renewable electricity production or of efficiency cannot both add carbon credits because of its indirect carbon reduction, and provide REC credits as well. Grey areas may be left, for example: what if a renewable energy project owner would rather sell carbon offsets and market to non-utilities the power stripped of its environmental attributes? Does that strategy comply with applicable regulatory schemes?

While, in the general publics eye, renewable energy production and carbon credits creation are conflated, this may well not be the case in long term market decision-making, and even the operation of trading markets would not appear to be enhanced by this situation.

Importation of Global Uncertainties. Uncertainty as to the rules of the climate change game may be further exacerbated when the shape and operation of the applicable rules is also keyed to achieving larger international linkage policy goals. In the larger policy sense it certainly may be desirable to link the worlds regulatory systems, and for the United States to be a leader in the process. Short of that, however, there may be legal complexity whose market impacts may be sub-optimal. The pool of offset credits is envisioned as half domestic offsets and half from international sources. Then translation sets in: beginning in 2018, 1.25 international offset credits must be submitted for each ton of emissions. Detailed provisions for qualification and award of international offset credits are slated to be developed by EPA in conjunction with the Department of State and AID. The focus is on encouragement of GHG mitigation in those sectors in developing countries with which bilateral treaties are reached and where several criteria designed to assure credit quality are met, thereby facilitating the fungibility of international and domestic credits. The proposed law does not, however, stop there. Social engineering is also built into the required findings by U.S. agencies, e.g., that in the sector, the host nation has done enough to encourage equitable sharing of profits and benefits derived from international offset credits with local communities, indigenous peoples and forest dependent communities.

The introduction of the international complexity in the availability, value weighting, and eligibility of offsets begins as an effort at globalization and interface with the regimes of international bodies. There is the danger that it is susceptible of morphing into a tool for some super-national stewardship and/or de facto domestic protectionism. It introduces another agency actor on the stage, with another set of policy motivations. It introduces another source of change over time.

Trading markets can superficially adapt to (and profit from) the speculative opportunities which are thereby created. However, to the extent offset rules are further encouraged to become a seedbed of ongoing uncertainty and distortions triggered by policy variables, private decision makers will find it harder to make environmentally and economically sound decisions which manage risk well.

Risk Management Issues. Waxman-Markey does provide opportunities to deal with the risks associated with defects or performance slippage in the operation of the offset system. A notable example is in the agricultural sector where opportunities may be generated from sustainable practices, but remain subject to issues of permanence and reversal. Consequently, the concept of term offsets has been statutorily introduced, i.e., temporary offsets which expire after a maximum of five years, because farmers cannot commit to assure creation of offsets beyond that period. Term offsets therefore expire, but they are subject to revalidation. However, a covered entity seeking to gain the benefits of the use of term offsets may not use them to demonstrate compliance unless it simultaneously makes a showing to EPA that it will have sufficient enough resources to obtain the necessary quantity of allowances or credits necessary from other sources, if need be, to demonstrate final compliance.

The adequacy of the statutory provisions to address risk management issues has been questioned. One important context has been biological sequestration, which represents the largest source of potential farm and forestry offsets. Among the concerns voiced has been the need for assurance that domestic offsets are fully fungible with each other and with allowances. It has also been suggested that offsets should be made available at the program, rather than the project level, so that pooled risks for multiple projects can be addressed through what has been dubbed risk management behind the registry. Otherwise, it may not be feasible for adequate risk protection to be made available for smaller projects.

Conclusions

Why are these overlapping flaws in the proposed offset system--dispersal of administrative responsibilities, fragmentation of green programs, importation of global uncertainties, deficiencies in risk management--of such practical significance? The answer is because collectively they obscure the clarity of GHG mitigation cost option comparisons by GHG generators. Collectively they increase market volatility which, in turn, leads to a damper on decision maker actions.

This possibility of clarity in decision-making facilitated by markets is the basis for what is ultimately postulated as the motivating force for technical innovation. It is the modern adaptation of the invisible hand dictum of Adam Smith, only now the magic of the market proclaimed is not just to aggregate wealth but to lead self-interested pollution reduction as well. It is

a premier justification of a cap and trade system, as opposed to a command and control system. If regulatory uncertainties impair market operation on an ongoing basis, this updated neo-classical rationale for the creation of the cap and trade system will be more suspect. While there may be offset projects and there will be trading volume, based on available information, the invisible hand of the market, on which policy makers are counting, will be paralyzed by the ongoing complexity and uncertainty which the system presents to actual decision makers who are not confident of the price signals they are receiving. As the renewable energy industry has recently demonstrated, innovation only thrives where price signals are within a predictable band on which investors can rely. There is no reason to assume that confusing offset price signals will have a different effect.

In their haste to achieve passage of the cap and trade climate change principle--to just do it, as one noted columnist recently prescribed--there should not be created a new funny money which can be proliferated in volume without producing the sorely needed investment in new innovation in green technology necessary to ultimately reverse the precipitous slide into global warming. In short, lets hope Congress is wise enough not to inadvertently offset the potential of the invisible hand.