

INDUSTRY PROVINCIAL OFFSETS GROUP (IPOG)

REGISTRY & MARKET WORKING GROUP

**CONSIDERATIONS AND RECOMMENDATIONS FOR A
CANADIAN CARBON MARKET AND OFFSET CREDIT
SYSTEM**

REPORT TO ENVIRONMENT CANADA

DECEMBER 7, 2007



Introduction

The following represents the view of Canada's *Industry Provincial Offsets Group (IPOG)*, a group of representatives from provincial governments, industry and service providers. IPOG's goal is to provide the federal government with technical input and recommendations on the design and development of a robust, efficient domestic greenhouse gas (GHG) offsets system in Canada. As with previous submissions, the views and recommendations throughout this piece are supported by a number of organizations engaged in the nationwide IPOG process.

Prepared by members of IPOG's *Registry & Market Working Group*, this report serves two purposes:

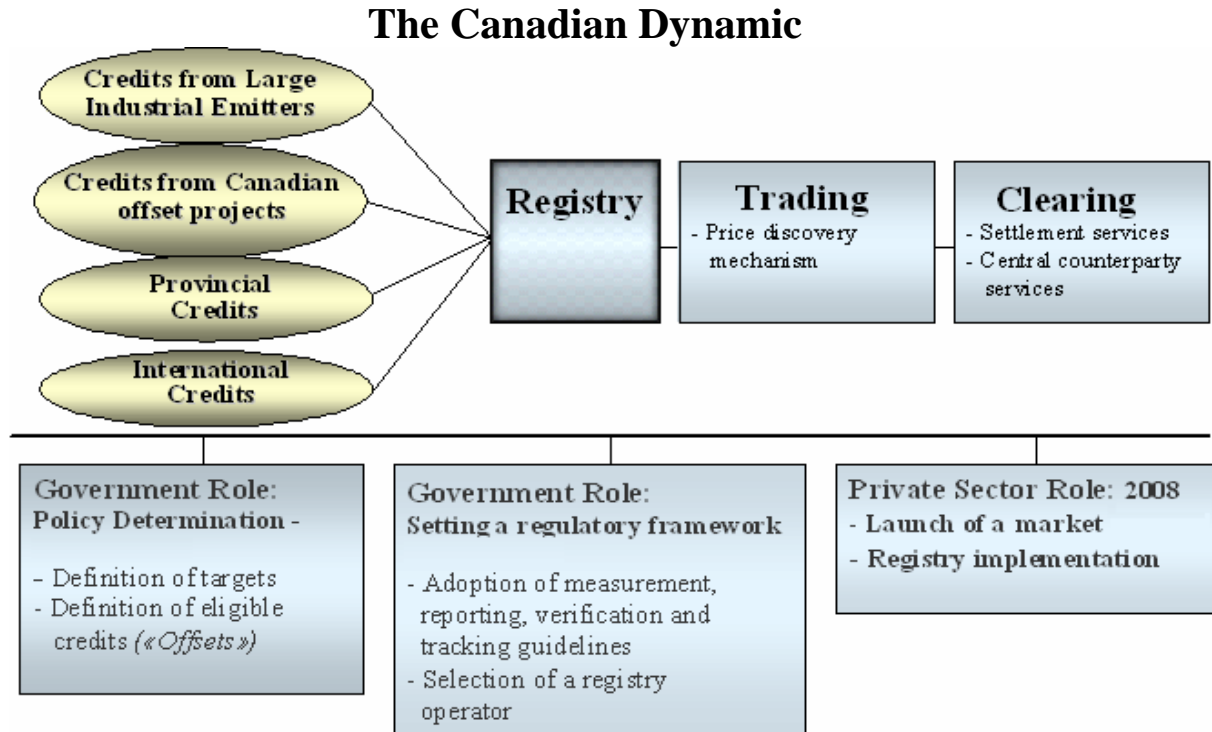
1. To discuss the essential elements for the regulatory framework to foster efficient carbon markets and exchanges. A separate paper (*Elements of an Efficient Carbon Credit Registry*) regarding essential elements for a national registry was recently submitted.
2. To highlight the growing concerns of market participants regarding the likely lack of liquidity in the early stages of the compliance market (and offer some potential solutions).

A lack of domestic liquidity caused by insufficient supply of domestic credits in the early stages of the market is unlikely to be met by any of the elements currently contemplated within the regulatory framework. Although derivatives markets (a fundamental piece of the carbon market complex) bring some time-flexibility to transactions, can facilitate the importation of foreign credits, and may attract non-compliance based participants into the market, they cannot create additional supply in the underlying asset (verified domestic carbon reductions). If there is insufficient supply at the time the contracts expire, price spikes and shortages could lead to deliverability failures.

Such failures would seriously undermine both domestic and international confidence in the Canadian carbon markets. Moreover, the prospect of deliverability shortfalls may lead to poor market liquidity (cash, futures and forwards) and may also lead emitters to adopt risk-management strategies that are harmful to the Canadian economy. It is with these concerns in mind that IPOG puts forward some suggested mechanisms for consideration that could increase the availability of tradable credits in the early stages of the compliance regime.

Overview

This document highlights the key design elements of the regulatory emission trading scheme and necessary market conditions required to facilitate the emergence and the development of an efficient carbon market place.



Fundamental Regulatory Requirements to Ensure Market Effectiveness

To allow the emergence of an efficient market place, the Government should aim to ensure the following conditions.

- **Single Credit Standard:**
 - Fungibility between regulated emitters credits and offset credits providing a unique price signal and promoting the creation of a unique trading currency that participants can trade with confidence and without further due diligence.
- **Targets Certainty:**
 - Definition of sector and facility specific targets (Compliance Risk Exposure).
- **Policy Timeliness**
 - Delays in providing timely policy certainty can undermine demand and supply conditions, delay investment decisions in offset and abatement projects, and raise compliance risk for emitters.

- **Predictability of Compliance Options: Continuous use of market forces.**
 - Knowledge that the Technology Investment Fund (TIF) will be gradually phased out leaving the market as the only compliance option.
- **Environmental Confidence:** The integrity of the market rests on the certainty, predictability and transparency of the Government rules.
 - Transparency and proper disclosure requirements: The EU ETS early experience has highlighted the impact of imperfect information on prices. The volatility that it caused demonstrates the importance of transparency in initial allocation plans.
 - Integrity: The Government needs to quickly establish a registry that is key to track ownership and provide environmental integrity. IPOG has submitted a separate paper with specific recommendations regarding the organization and functions of the registry.
- **Liquidity Requirements for Compliance Purposes:**
 - Definition of a broad scope of eligible domestic offset projects to foster the development of the supply side of the market.
 - Minimizing negative impacts for the offset program by the TIF structure
 - Recognition of early action credits as tradable units to foster immediate liquidity.
 - Intensity targets must be set at reasonably stringent levels to result in absolute reductions and create the scarcity necessary to establish a price signal that will stimulate emissions reduction.
 - The ability to carry credits from one period to the other (Banking).
 - Clarity and flexibility on the equivalency agreements with the provinces.

The government expects a transition period leading gradually to the domestic market solution becoming the main compliance option by 2018 (the other options being the TIF for up to 70% in 2010 of compliance requirements and CER credits for up to 10%). However, there is a real structural concern by market participants regarding a shortage of domestic compliance credits, particularly for the first year of compliance in 2010 that could cause a deliverability problem. We encourage the federal government to consider the issue and to provide for mechanisms that will ensure sufficient compliance liquidity. New pools of compliance liquidity could for example be provided by:

- Broadening sector and emission sources;
- Extending access to international credits;
- Exploring ways to recognize provincial credits and protocols wherever possible
- Permitting pre-crediting :
 - Environment Canada could distribute credits ex-ante to regulated emitters.
 - Environment Canada could recognize and regulate advance sales of credits by regulated emitters

- Environment Canada could recognize and regulate advance sales of credits by sponsors of offset projects.

- **Early Market Liquidity Requirements**

In general, broadening the scope of the domestic scheme will tend to lower costs and reduce volatility, contributing to the development of early liquidity for an emerging market by fostering the creation of a critical mass of buyers and sellers.

However, early liquidity in this new market is difficult to build due to the fact that credits, in an intensity based framework, are only created ‘ex-post’ from offsets (not before the end of 2008) and abatement by regulated emitters (not before the end of 2010). Consequently, the initial supply as a result of the government’s proposed regulatory framework may be reduced.

The concerns of early liquidity conditions in the initial stages of development of the carbon markets were also shared in Europe, even with ex-ante allocation of tradable allowances and this was a prime reason for the development of forward-type markets. Early liquidity may be accommodated by futures and forward markets, where buyers and sellers may manage the price risks related to their future needs and lock – in the future purchase or sale of emission credits. Furthermore, the futures market is likely to bring external sources of liquidity by attracting a number of economic agents, not required to trade for compliance purposes, such as industries, investment banks and investors, thereby assisting early liquidity conditions.

Even with the accommodations of a futures market, concerns regarding early liquidity in Canada may be exacerbated under an intensity-based system, without ex ante allocations. And an overall shortage of deliverable credits at maturity of the forward/futures contract that coincides with an overall shortage of deliverable credits during the compliance period cannot be solved by any marketplace mechanism, whether cash, futures, or forward contracts. Moreover, credits that are only known to be deliverable late in the compliance period may ease the deliverability problem at the end of the compliance period, but may result in emitters facing high perceived risk until then, leading them to potentially engage in more costly credit acquisition strategies or economically costly production or production location decisions.

IPOG recommends that Environment Canada immediately assess the likelihood of deliverability shortfalls, given the structure of the compliance system, and consider one or all of the following solutions.

Rationale and analysis for each deliverability solution

1) Broadening sector and emission sources

- The rationale of this approach is that the broadest capture of emission sources in the country should lead to the least volatile supply-demand imbalances.
- The benefit of this approach is that it would require no change to the structure of the compliance regime.

- The negatives of this approach are that:
 - Increasing the breadth of the regime extends the regulation of emissions into increasingly smaller sectors with quickly diminishing returns, especially relative to the cost of emission regulation.
 - There is no reason to expect that this approach will deliver any net positive additional deliverability, let alone of necessary scale

2) Extending access to international credits

- The rationale for this approach is that accessing international credits is expected to result in sufficient supply at little risk.
- The benefits of this approach are that 1) it would require no change to the structure of the compliance regime, except for changing the quantities of international credits that can be accepted for compliance 2) provide a price signal in Canada that is closer to the global price for carbon; and 3) increase liquidity and reduce volatility in the Canadian domestic market.
- The negatives of this approach are that:
 - i. Increasing the portion of compliance that comes from international credits reduces the domestic clean air benefits that currently form part of the government policy

3) Exploring ways to recognize provincial credits and protocols wherever possible

- The rationale for this approach is that many provinces are already working on, or have implemented, provincially-based GHG programs. By the time the federal regulations are established, many Canadian emitters will already be operating under provincial regulations.
- To avoid double-jeopardy issues, and to make the system as seamless as possible for Canadian companies, the federal government should make every effort to be as flexible as possible when examining provincial programs for equivalency.
- The additional benefit of this approach is increased liquidity in the overall Canadian GHG system.
- The potential negatives of this approach are:
 - the possibility that less-stringent reductions are used by LFEs than would have been the case without the equivalency agreement.
 - the federal government would not have a direct role in the review and monitoring of projects, which would make managing liability more difficult.

4) Ex ante distribution of credits to regulated emitters, while retaining intensity approach

- The rationale for this approach is that distributing credits ex ante to regulated emitters in a quantity equal to a portion (to be determined) of baseline emissions would allow those emitters who expect to generate credits in the first compliance period to sell some of those distributed credits.
- The benefits of this approach are that it requires only a modest change to the structure of the compliance regime (allocations, accounting for allocations in compliance) and provides added liquidity and less volatility in the domestic market.
- The negatives of this approach are that:
 - There is a risk that if the portion distributed is too high it might be in excess of the target emissions for that period (for an emitter with declining production), resulting in a need for that emitter to deliver additional credits back to the government.
 - There is a risk that if the portion of baseline emissions distributed in credits is too low, emitters will be too risk averse to sell any credits.
 - There is a risk that if the portion of baseline emissions that is distributed in credits is too high, credit prices will be depressed in the first compliance period below that needed to stimulate offsets and emissions reductions.

5) Recognition and regulation by Environment Canada of advance sales by emitters of a portion of their baseline emissions

- The rationale of this approach is that emitters who expect to post actual intensity below their target intensity will have the opportunity to supply credits to the market at times when credit prices may be elevated relative to projections of future prices, thereby supply the market with adequate credits.
- The benefit of this approach is that it requires only a modest change to the structure in the compliance regime (allow advance sales, account for advance sales in compliance), and likely avoids the risk of flooding the market with low-priced credits. Note that these credits would need to be completely fungible with other credits, so that no further investigation by purchasers is needed.
- The negatives to this approach include:
 - Emitters may be too risk averse to supply adequate quantities to the market to relieve the deliverability problem – this is a question of fact.

6) Recognition and regulation by Environment Canada of advance sales by sponsors of offset projects (of a portion of their expected credits, with potential for a portion of the proceeds to be held as a security deposit by the government.)

- The rationale of this approach is that some sponsors of offset projects are likely to be receiving verification of emission reductions (and thus awarding

of credits) late in the compliance period or in the verification period just after the end of the compliance period, or too late for large scale emitter risk management – this approach would free those credits up for earlier delivery.

- The benefits of this approach are that it accelerates the supply of credits to the marketplace, and it provides an additional source of liquidity for offset project sponsors, giving them additional financing flexibility.
- The negatives of this approach are that:
 - It requires the most change to the structure of the compliance regime (assess likely credits, determine portion allowed to be sold in advance, collateral program, compliance accounting for offset project sponsors).
 - There is a risk that a failure to deliver by the offset project may exceed the amount of security deposit or collateral, and may result in a shortfall of recovery by the government, as well as an emissions performance shortfall at the national level.
 - Rules less stringent than in other jurisdictions could limit the potential for international linkages.

Any of the ‘pre-crediting’ solutions discussed above (items 4 through 6) may introduce additional risk into the system. These advance credits must be acknowledged to be equivalent to other credits within the system if they are to truly add liquidity (i.e. they cannot be a ‘provisional’ or temporary credit). The buyer will therefore not assume any additional risk by purchasing an advance credit. The primary risk is that the seller fails to deliver sufficient abatement or offsets at the compliance period deadline against their advance credits sold. The penalties against the seller should be severe enough to limit such failures, so that shortfalls at the national level are modest, if any, and not out of scale with other potential causes of national shortfall (for example, if an emitter fails to meet their target, they pay a penalty, but the nation has also fallen short of its target). However, if the government wishes to maintain the potential for international linkages, the government will ultimately be required to assume the risk of delivery failure for these advance-credit solutions.¹

¹ International linkage may require slightly more work, depending on whether an emitter or offset project sponsor is selling in advance. These comments apply only to sales within the Kyoto signatory region, and are drawn from the Kyoto handbook. Consider emitter sales first. For the Canadian registry to transfer Assigned Amount Units to another Kyoto registry will already require that the Canadian registry vouch that valid AAUs are being transferred, as Canada will not have assigned any AAUs in an ex post intensity scheme. This requirement is the same whether an emitter is selling credits in advance or not. An international sale will also require that Canada not fall below its compliance period reserve, and this requirement will apply to any type of sale. For sales of offset credits, it is not clear which Kyoto transference scheme Canada will use for offset credits in any event – if Canada facilitates international sales of offsets through transfers of AAUs, no additional work will need be done relative to other sales. If Canada permits direct sales of offset credits, an advance international sale of an offset credit may require that the seller sell through the registry. In any event, Canada’s risk of national shortfall is the same whether the advance sale happens domestically or internationally. Advance international sales do increase the stress on Canada’s compliance period reserve, but it is likely that other stresses will be greater.”

Summary:

The government must assess the risk of such solutions against the risk of an illiquid market that is unable to meet the compliance demand that they have imposed. The key point is that the government has a responsibility to ensure that market participants have a reasonable ability to fulfill their compliance obligations. Market participants are currently concerned that without additional means of injecting domestic supply into the system, there will be difficulty in meeting the 20% of their compliance requirement that must be met with domestic credits.