

EnviroPath: *AB Market Update*

March 21, 2017

Dear Clients and Friends,

On March 3rd, the Alberta Government announced a number of changes related to the implementation of the Output-Based Allocation system. As part of EnviroPath's ongoing participation in the Alberta carbon market, we are pleased to offer you a summary of these changes and thoughts around strategic considerations.

Offsets and EPCs will be an ongoing part of the Alberta carbon market

AB Carbon Market Program Changes

1. Alberta based offsets and Emissions Performance Credits (EPCs) will be part of the Output-Based Allocation (OBA) system going forward. Existing offsets and EPCs will be grandfathered into the new system.
2. There will be a 30% volumetric limit placed on offset/EPC usage for compliance from 2018 onward. This will not impact the option to use offsets and EPCs for up to 100% of compliance in 2016 and 2017.
3. Quarterly reporting and compliance requirements for facilities with emissions greater than 1Mt, starting in 2018. These facilities will also be required to forecast production, emissions and compliance strategy on an annual basis.

AB Carbon Market Commentary

OBA outcomes remain a key source of demand uncertainty

The 30% offset usage limit has been the headline item in the government's recent announcement. Historically, offset and EPC usage has ranged between 3%¹ and 59%, with the average during the 2007 - 2015 time period being 38%. Payment into the Tech Fund has ranged from \$41.3mm in 2007 to \$135.6mm in 2015 with average payment into the Fund of \$82.2mm

As at the end of February 2017 nearly 62mm offsets have been listed on the CSA registry since program inception. Currently 27.8mm of this total are "active", meaning they have not been used for compliance. Annual offset and EPC creation has averaged 2.8mm and 2.18mm respectively.

¹ All offset and EPC data based on the Alberta Carbon Registry as at February 28th, 2017. All calculations derived and/or inferred from this data.

<https://www.csaregistries.ca/albertacarbonregistries/home.cfm>

Demand for compliance mechanisms, whether Tech Fund payment or offsets/EPCs has averaged roughly 9.45 Mt for 2008 through 2015. With the intensity target increased to 15% for 2016 compliance, demand is estimated to be 11.7 Mt and increase again to 15.6 Mt in 2017 when the intensity target goes to 20%.

A key uncertainty for demand going forward is the OBA discussions. Potential outcomes at this stage are flat to increased compliance targets overall. If targets are higher, the offset/EPC usage limit will be 30% of a larger number meaning demand, while still likely reduced, may be less impacted than at first glance.

Offsets and EPCs provide a compelling compliance option

Offset/EPC Compliance Strategies

2017

The announced changes to the Alberta market may create some short-term opportunities for both buyers and sellers. For buyers, 2017 will be the last year to maximize compliance cost savings. The existing inventory of offsets combined with potentially lower future demand may result in more attractive pricing than would otherwise be the case. For sellers, 2017 should provide strong demand as compliance entities look to minimize their compliance cost through offset and EPC usage.

Offsets/EPCs procured at a reasonable discount to the Tech Fund, even for smaller compliance volumes, can result in material cost savings. The following table represents an example of cost savings through offset and/or EPC usage for a theoretical 150k compliance obligation:

Price paid per EPC/Offset	\$20	\$21	\$22	\$23	\$24	\$25	\$26	\$27	\$28
Savings on a 150k compliance obligation through 100% offset/EPC usage	\$1,500,000	\$1,350,000	\$1,200,000	\$1,050,000	\$900,000	\$750,000	\$600,000	\$450,000	\$300,000

Given the potential savings, it will be important to ensure that offsets and EPCs are transacted in an open and transparent manner to ensure that they were obtained at market price and to track the value of the offsets/EPCs post-procurement.

2018

From 2018 onward, covered entities will be able to use a maximum of 30% offsets and EPCs for compliance. Using the same 150k compliance example illustrated above, savings through the use of offsets and EPCs remains material.

Price paid per EPC/Offset	\$20	\$21	\$22	\$23	\$24	\$25	\$26	\$27	\$28
Savings on a 150k compliance obligation through 30% offset/EPC usage (45k)	\$450,000	\$405,000	\$360,000	\$315,000	\$270,000	\$225,000	\$180,000	\$135,000	\$90,000

Smaller volume requirements do, however, increase the importance of other transactional considerations. For example, transaction costs (e.g. legal, credit,

Transactional costs will be increasingly important from 2018

etc.) tend to be similar whether purchasing 10k or 150k of offsets or EPCs. Minimizing or eliminating these costs through a simplified transaction process therefore takes on a greater importance.

Similarly, for companies with facilities that exceed the 1Mt, being able to quickly and simply procure volumes just prior to quarterly compliance helps to minimize carrying costs associated with holding an inventory of offsets.

EnviroPath Market and Update

In 2016 Wattex, a wholly owned subsidiary of the NGX, launched the EnviroPath carbon market. EnviroPath offers simple, transparent and cost-effective offset and EPC transactions for the Alberta market. Leveraging a standardized spot contract and proven auction platforms, buyers and sellers are able to transact and



settle quickly, enabling greater compliance flexibility.

EnviroPath continues to grow and has now signed-on a critical mass of Alberta market participants. 2017 will see the launch of a number of competitive and transparent auctions in the second quarter.

If you have questions about the Alberta carbon market or would like to learn more about the EnviroPath platform please feel free to contact us:

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