

EnviroPath:

Alberta Offset Cost of Carry

August, 2017

A consideration in purchasing Alberta offsets or Emissions performance Credits (EPCs) is the timing of the transaction. Offsets or EPCs can be purchased for current year compliance or future years if one is looking to hedge against a higher carbon price.

The following tables provide an analysis of the cost to purchase and carry offsets or EPCs in advance of a compliance need. Variables that are considered are interest rate (internal cost of capital), purchase price and time held. It is assumed that the alternative compliance option is payment into the Climate Change and Emissions Management Fund, which currently sits at \$30/tonne.

Holding periods of less than one year are not exclusively considered, but can be inferred by dividing the interest after a one year hold by the desired time frame (e.g. divide by two if a six-month hold is envisaged, and divide by four for quarterly)

*A low cost of capital
can make hedging
for multiple years
cost effective*

Example 1: 5% Cost of Capital

		Holding Period		
Cost of Capital	5%	1 year hold	2 year hold	3 year hold
Purchase Price	\$20	\$21.00	\$22.05	\$23.15
	\$22	\$23.10	\$24.26	\$25.47
	\$24	\$25.20	\$26.46	\$27.78
	\$26	\$27.30	\$28.67	\$30.10
	\$28	\$29.40	\$32.10	\$32.41

In this example a 5% cost of carry is applied to different purchase price, ranging from \$20 to \$28. The purchase price is then considered one to three years out. Thus, in the case of a \$20 offset or EPC, held for three years, the cost would be \$23.15, a 23% discount, assuming the Climate Change and Emissions Management Fund price remains \$30 at that point.

The following tables provide similar insight as Example 1, with the only difference being cost of capital.

Example 2: 7% Cost of Capital

		Holding Period		
Cost of Capital	7%	1 year hold	2 year hold	3 year hold
Purchase Price	\$20	\$21.40	\$22.90	\$24.50
	\$22	\$23.54	\$25.19	\$26.95
	\$24	\$25.68	\$27.48	\$29.40
	\$26	\$27.82	\$29.77	\$31.85
	\$28	\$29.96	\$33.98	\$34.30

Example 2 follows the same format as example 1. In general the higher the cost of capital the shorter one should be aiming to hold the offset or EPC, or the lower the price one would be willing to pay to purchase it.

Variables that may come into play in a cost of carry analysis, that are not considered here, may include expected regulatory changes. For example, if federal carbon pricing reaches \$40 by 2021, one might be willing to pay a higher price for an offset or EPC than the cost of carry analysis might suggest.

Forward hedging can help shield against a higher carbon price

EnviroPath Market

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.



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:

Help Line: 1-888-NGX.5888 or local at 403-974-4357

Email: enviropath@ngx.com

Website: www.ngx.com

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