The Whole Version:
Carbon credit chronicles

The 4th wave

Martin Clermont, CEO

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My intuition concerning a 4th wave of demand for voluntary market carbon offsets has been confirmed! It is refreshing to see that there is a consumer response, even if it is only nascent, to the scientific outcry from the IPCC’s october 2018 presentation. In the midst of the relentless increase of carbon emissions and the climate tone-deaf building boom along the Atlantic coastline, it is great to see that there is a drop of sense and reason starting to bubble up from consumers. What is the pertinence of this demand for voluntary market carbon offsets outside of normal regulatory constraints to face the climate change challenge?

Without getting into the details, here is a brief history of the demand for voluntary carbon market credits:

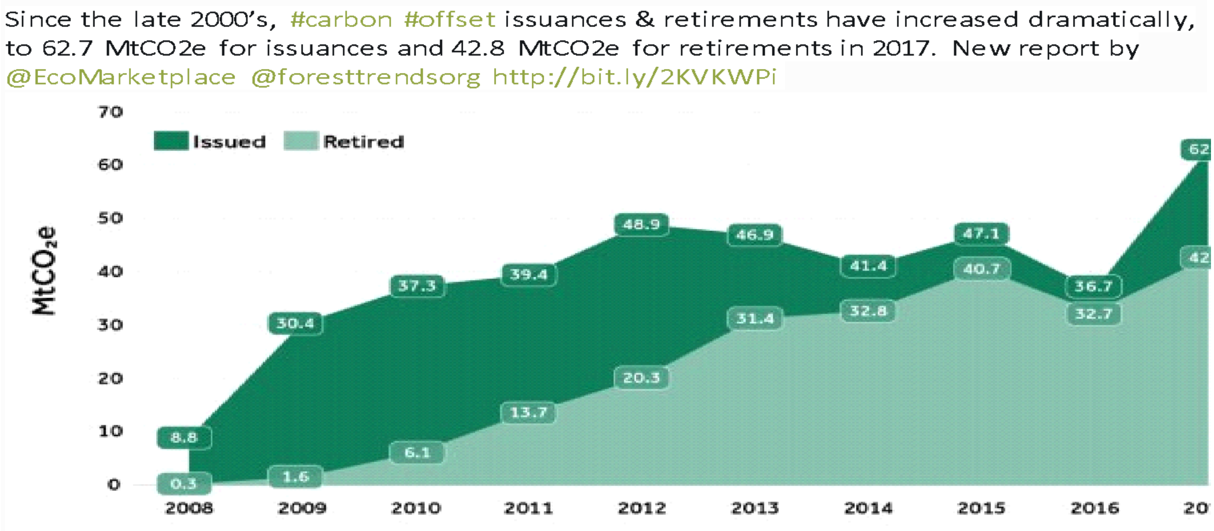
1st wave (pre-2008): the Kyoto Protocol brings about the use of Clean Development Mechanisms (CDM) and one of the first regulated Cap & Trade markets, the European EU-ETS is born and with it the demand for carbon credits.

2nd wave (2008-2012): this period is marked by the rise and fall of the voluntary market, specifically the Chicago Climate Exchange (CCS), the operation of EU-ETS, the 2008 financial crisis, the failure of the US to implement a national Cap & Trade market, the election of governor Brown in California and his support for the Western Climate Initiative (in which California and Quebec still participate today) and the dramatic end of the EU-ETS.

3rd wave (2013-2018): in this period we saw the European market stagnation, the beginning of the WCI, the 2015 Paris Accords, the implementation of national contributions (NDC) and market stabilization which allowed the EU-ETS to make a comeback.

4th wave (2019-): a market increase in financial institutions declaring zero carbon goals, the implementation of online transactional platforms for voluntary carbon market trading and the beginning of block chain technologies.

The graphic below, produced by *Ecosytem Marketplace*, allows us to see these four waves clearly, without focusing on the secondary broker's market and reseller.



Réf : Voluntary Carbon Markets Insights: 2018 Outlook and First-Quarter Trends; August 2018
https://www.forest-trends.org/wp-content/uploads/2018/09/VCM-Q1-Report_Full-Version-2.pdf

The actual economic and political policies in place are having a difficult time responding to the increasing and urgent demand for the reduction of GHGs of 45% by 2030 (2010 reference). One of the climate mantras of the World Bank since 2014 has been «*Put a price on carbon*». The World Bank reminded us that there were two ways to do this: Emission Trading Systems (ETS) or Cap & Trade and, a second mechanism, carbon taxes. These two mechanisms must both be implemented by government policies. According to the expert Michael Mehling of MIT, actual government climate policies are inadequate and insufficient, *" To me, all this reflects the fact that climate policies around the globe, despite some limited pockets of progress, remain woefully inadequate" .* Already, we are seeing American politicians stepping up and positioning themselves more forcefully in response to the general world climate outcry, such is the case with the Green New Deal (GND).

For the past five years, these two mechanisms are accompanied by other regulatory policies, for example, in the car industry, governments are offering rebates on electric vehicles and imposing higher emissions standards every year. In addition, important pension funds and financial institutions are sending clear signals that they are moving towards serious carbon offsetting solutions and zero carbon goals. This slow divesting of carbon includes the use of coal, as well as the exploration and extraction of new fossil fuels such as those in Norway.

As part of this general movement, propelled by civil society, we see that this 4th wave of consumer demand for carbon offsets from the voluntary market is originating from both the bottom and the top rungs of society. There is currently enough room around the social cost of carbon which undulates between US$ 40 to US$ 80/tCO_2ee versus the current carbon prices fixed by governments (as illustrated by the graph below). This graph allows us to see the evolution of carbon prices on various Cap & Trade systems which, in 2018, the unit prices were inferior to US$ 30/tCO_2ee, which is considerably lower than the lowest range of the social cost of carbon.

Réf : ICAP ($/t$CO_2$e from 2010 up to 2018) [*https://icapcarbonaction.com/en/ets-prices*](https://icapcarbonaction.com/en/ets-prices)