Hong Kong's Green Path to Becoming a Regional Carbon Trading Centre

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Last year, in collaboration with the Hong Kong Productivity Council, we conducted a study on Hong Kong's reindustrialization and its future path of economic transformation, with reference to Switzerland's economic and social situation and Hong Kong's green industries. Hence we are pleased to learn about the recent announcement by the Hong Kong Exchanges and Clearing Limited (HKEX) to launch the International Carbon Council to spearhead Hong Kong's drive towards carbon neutrality and to facilitate its dedication to the development of a green and sustainable financial ecosystem. In this article, with the Swiss experience in expanding carbon trading as an example, I am looking to explore with readers the opportunities for Hong Kong in this regard.

Carbon trading can be conducted in either the compliance market or voluntary market. This concept was born with the ratification of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. It enables a country, region, or company, through legitimate channels, to emit pollutants created in the manufacturing process. After a 29-year span, with the conclusion of the UN Climate Change Conference in Glasgow (COP26) in 2021, government organizations and companies around the world jointly laid down the path towards zero emission by 2050, limiting global warming to 1.5 degrees Celsius. According to information services provider IHS Markit, as of the end of 2021, global carbon price reached US$51.45 per ton of carbon dioxide. It is estimated that carbon quota price will need to be raised to US$147 per ton of carbon dioxide in order to stay below the 1.5-degree-Celsius global warming ceiling. Obviously the potential of carbon pricing still remains untapped to a large extent while most of the carbon prices in the world are too low to incentivize large-scale decarbonization. Current sustainability and climate policies of national governments and private companies lag too far behind schedule to achieve the temperature goal of the Paris Agreement.

How to boost carbon trading in Switzerland where carbon tax is one of the highest in the world?

Carbon trading is a marketized policy tool for energy conservation and emission reduction, with the aim of cutting down carbon emissions, lowering energy consumption and atmospheric carbon density, as well as optimizing industrial and energy structures through market functions. Theoretically, while governments set and control the overall quantities as well as allocate regulations, companies with assigned allowances can decide whether to buy carbon credits or sell surplus allowances based on their own emission situations. For example, despite its unexpected exclusion from the Fortune 500 list in 2022, the electric-vehicle behemoth Tesla recorded total annual profit standing at US$5.519 billion and sales of carbon credits valued at US$1.465 billion in 2021. The fact that a quarter of the company's revenues come from carbon trading goes to show how carbon trading will become instrumental in channelling capital and accelerating carbon reduction.

Perhaps a leaf can be taken from Switzerland's book. The country adopts a two-pronged policy approach, integrating carbon market and carbon tax and has since 2008 been levying a carbon dioxide tax on fossil fuels. Its carbon reduction and development of carbon-trading market have roughly undergone the following three phases spanning over a decade.

Phase 1: Between 2009 and 2012, voluntary carbon emissions trading was implemented with the aim of reducing carbon emissions by 8% in comparison with 1990.

Phase 2: Between 2013 and 2020, Switzerland instead put in place a mandatory carbon trading system. The aim was to reduce the total emission allowance by 1.74% per year, with 5% reserved for auctions or newly registered companies. This would spell out the annual emission allowance while lowered allowance supply would lead to emission reduction. Under the carbon tax system implemented concurrently,

companies engaging in carbon trading were exempted from carbon tax during the same period.
Phase 3: The Swiss carbon market was linked with the EU carbon market in 2020.

Judging by the evolution of the Swiss carbon market, the establishment of links between different carbon markets will bring more trading opportunities. Though smaller and less liquid, the Swiss carbon market boasts higher allowance prices than the European Union (EU). Switzerland enhances its competitiveness through collaboration with the EU carbon markets. Once the carbon prices of a carbon market become too high, it can cooperate with other carbon markets to create a green and business-friendly environment for companies.
Currently, the SAR Government's emission reduction policy, primarily based on Hong Kong's Climate Action Plan 2050 released in 2021, is geared towards promoting renewable energy sources and low-carbon power generation technologies and offsetting carbon footprint as the primary strategy. Apart from existing policies, local policymakers can contemplate its role and positioning in the carbon markets of RCEP, the Greater Bay Area, and China. Interlinking with the systems of adjacent areas with a carbon market is also an important goal for which policymakers will find it necessary to deregulate the market for corporations, enhancing the SAR's leadership status in green finance and efforts to tackle climate change.

Encouraging the community and retail investors to join the carbon market

Mature economies and capital markets can convert tradable carbon rights into Exchange Traded Funds (ETF). For example, one of the largest Assets under Management (AuM) voluntary carbon trading ETFs is the KraneShares Global Carbon Strategy ETF (US stock code: KRBN). Launched in July 2020, this ETF has so far recorded a net AuM value at US$1.178 billion, with a management fee at 0.78%. During the last two years, its fund price rocketed by nearly 250%, with a CAGR (compound annual growth rate) at 58%. In comparison, the S&P 500 index has risen by just around 20%, with a CAGR at approximately 9.5%. The two-year return of KRBN exceeds that of S&P 500 companies by a staggering 192%. From the perspectives of economics and capital, more capital flows into carbon financial products will create adequate liquidity, which is tantamount to indirectly participating in carbon pricing. In the long run, this will reap positive gains.

In March 2022, the HKEX launched Hong Kong's first carbon futures ETF, the CICC Carbon Futures ETF (stock code: 3060) with a management fee at 0.99%. With an initial AuM valued at under $100 million, the new ETF is not attractive for lack of buying potential in the market. As a matter of fact, in Hong Kong's capital market, there is a host of companies well-positioned to conduct carbon trading and some of them are even world leaders in electric vehicles, lithium batteries, and new energy sources.

So far, the major participants in carbon trading and green finance are institutional investors and sovereign wealth funds. As far as we know, even professional investors have little knowledge of carbon trading. Capital markets are like "water" and no fish can survive in sterile water. Compared with traditional funds, green finance offers low returns while the industry lacks professionals with an understanding of green products. Green finance courses available to the public may be popular but they are, more often than not, of varying standards. For Hong Kong to become a mature carbon trading centre, it is necessary to have both "water" and "fish", helping the general public to understand emission rights trading and to participate in voluntary carbon trading. The SAR Government should incentivize the industry to do marketing and establish guidelines and a comprehensive system for the benefit of the industry and people looking to take green finance courses.

In 2021, the G20 finance ministers and central bank governors acknowledged the importance of carbon pricing as a tool for tackling climate change. Already lagging behind other mature economies such as European countries by about a decade, Hong Kong must strive to make up ground. A quarter of a century has passed since Hong Kong's return to the motherland. The SAR is in urgent need to transform and diversify its economy to keep pace with the new era and create opportunities for future generations. Hopefully, stakeholders will join forces to drive carbon market development and build a sustainable financial ecosystem while more like-minded professionals and young people will be encouraged and educated to enter the sustainable finance sector, so that Hong Kong can find its rightful place as an international financial centre (see Note).

Note: "Forging Hong Kong into an ESG Metropolis and a Zero-carbon Economy", Heiwai Tang and Benson Lam, *Hong Kong Economic Journal*, 11 May 2021 (in Chinese)