

Green Transition – Calling for sustainable development to be given top priority in Hong Kong

Recently, the HKSAR Government has launched several new and updated ideas and initiatives to drive the green transition and sustainable development of Hong Kong. The topic of green development has been present in the CE's policy address, in the updated climate action plan, as well as in the planned reorganisation of the Environment Bureau into the Environment and Ecology Bureau.

The Sustainability Committee of the Swedish Chamber of Commerce in Hong Kong (SwedCham) supports the Government's action plan for a green transition in Hong Kong and once again encourages the Government to place a greater emphasis on this plan. By taking such action, it will position Hong Kong as an Asian hub for sustainable development and give the city a competitive edge over other financial centres.

In our last [position paper](#)¹(October 2020), we covered how Swedish companies in Hong Kong can facilitate and support a green recovery path and gave policy advice within Energy transition and decarbonization, Transportation, Recycling and waste management, Plastic waste, the Financial sector and Tourism sector.

In this position paper, we would like to call on the Government to expand its focus to the following areas:

- An enhanced partnership between the Government and the Business community
- Renewed focus on rapid decarbonization
- Realizing the promise of green buildings and a green construction industry
- A green transition of Hong Kong's food system

Government-Business Partnership

In Sweden, an initiative known as "[Fossil Free Sweden](#)"² was launched in 2015. The initiative is overseen by the government and is run by a national coordinator who enjoys the trust of both government and the business community. Through collaborative work between companies, associations, industries, municipalities and regions, Fossil Free Sweden is identifying obstacles and opportunities to accelerate the pace towards carbon neutrality.

On that basis, Fossil Free Sweden produces political proposals that are presented to the Swedish Government and bring together actors to implement measures. 22 business sectors have produced roadmaps for fossil-free competitiveness within the framework of Fossil Free Sweden. The roadmaps contain both commitments and political proposals. Fossil Free Sweden works to make the implementation of the roadmaps possible and is also developing strategies around different areas to speed up the transition. To achieve carbon neutrality by 2045, the business community has

¹ <https://www.swedcham.com.hk/wp-content/uploads/2020/10/A-Green-Recovery-SwedCham-Sustainability-Committee-8-Oct-2020.pdf> (last accessed 12 May 2022)

² <https://fossilfrittseverige.se/en/start-english/> (last accessed 12 May 2022)

*put forth more than 200 policy proposals to ease the transition as well as industry-specific actions and commitments. This was also covered in a seminar with participants from the Hong Kong S.A.R government, the Business Environment Council, the Swedish Government and companies in Hong Kong in December 2021.*³

We therefore propose that the Hong Kong government initiates:

- **The establishment of industry-focused joint working groups** tasked with reaching the carbon neutrality goal by or before 2050. The joint working groups can help the Government develop policy decisions to drive the green agenda, while at the same time creating a level playing field for the carbon reduction efforts (and innovation) that need to be undertaken by each industry.
- **Mechanism for the aggregation and follow-up** on the progress made towards the carbon neutrality goal and the various milestones set by the joint working groups. It will be necessary to continually review and follow up on current measures, policy efforts and commitments from the industry and see whether they are aligned with the carbon neutrality 2050 vision.

Rapid Decarbonization

The average CO₂ emission per kWh of produced electricity in Sweden is 39 grams whereas the corresponding figure for Hong Kong is around 710 grams.⁴ Most of Sweden's electricity supply comes from hydro and nuclear along with a growing contribution from wind, whilst heating is primarily supplied by waste-to-energy plants, bioenergy-based district heating and heat pumps⁵. The key energy sources in Sweden, hydro and nuclear, only emit 2% of the CO₂ emitted by natural gas and 1% of that emitted by coal. Sweden was one of the first countries to introduce a carbon tax (1991), a move which has proven effective at driving decarbonization⁶.

We therefore propose that the government considers:

- **A review of the fuel mix for electricity generation** – In Hong Kong, the major source of carbon emission is from electricity generation (66%)⁷. The Government has taken measures to reduce the emission rate, for instance by initiating the substitution of coal with natural gas. In Hong Kong's Climate Action Plan 2050, one of the goals stated is to stop using coal for daily electricity generation by 2035⁸, which SwedCham views favourably. However, it is estimated that the share of zero-carbon energy sources in Hong Kong needs to constitute 60-70% of the energy mix in order to reach the overall emission target for 2035⁹. They

³ https://www.linkedin.com/posts/consulate-general-of-sweden-in-hong-kong-and-macau_the-consulate-general-business-sweden-and-activity-6877520568162381825-puYq/?utm_source=linkedin_share&utm_medium=member_desktop_web (last accessed 12 May 2022)

⁴ <https://www.iea.org/countries/sweden> (last accessed 12 May 2022)

⁵ <https://www.energimyndigheten.se/> (last accessed 12 May 2022)

⁶ <https://ecofiscal.ca/2018/04/11/carbon-pricing-works-in-sweden/> (last accessed 12 May 2022)

⁷ https://www.climate-ready.gov.hk/files/pdf/CAP2050_booklet_en.pdf p.25 (last accessed 12 May 2022)

⁸ https://www.climate-ready.gov.hk/files/pdf/CAP2050_booklet_en.pdf p.29 (last accessed 12 May 2022)

⁹ https://www.climate-ready.gov.hk/files/pdf/CAP2050_booklet_en.pdf p.31 (last accessed 12 May 2022)

currently constitute around 25% (with nuclear power making up most of that; less than 1% is from renewable energy sources). In that context, the expected increase from >1% to 7.5%-10% of renewable energies by 2035, as outlined in the Climate Action Plan, thus seems rather insufficient¹⁰. Therefore, SwedCham encourages Hong Kong to set more ambitious targets for renewable energy usage, both regarding the development of solar, wind and waste-to-energy infrastructure as well as a ramped-up import of energy generated from these sources.

- **The utilisation of waste as an energy source before transitioning to carbon neutrality.** Hong Kong's plan to develop more advanced waste-to-energy facilities¹¹ is a good development since it would yield zero-carbon energy, while at the same time both relieving the overwhelmed waste management system and freeing up scarce land resources. In Sweden, thanks in large part to waste-to-energy plants, less than 1% of waste goes to landfills¹². It has also helped Sweden reduce carbon emissions since roughly 50% is incinerated and turned into energy¹³. Waste incineration needs to overcome pollution challenges, however this has been successfully done in Sweden by employing efficient methods and having an incineration process with "relatively low environmental impact"¹⁴. It is also important that the incineration process goes hand in hand with a ramped-up recycling effort to limit the degree of toxic materials that contribute to pollution. In Sweden around 49% of waste is recycled.¹⁵
- **Evaluate a carbon tax scheme.** In light of the need for a ramped-up action plan to achieve NetZero 2050, SwedCham views the implementation of the voluntarily traded "renewable energy certificates" in 2019 as a positive development. However, the number of certificates sold since the implementation corresponded to just 0.02% of the accumulated electricity sales in 2020¹⁶. To achieve a greater impact, we would recommend looking into a carbon tax scheme like the one used in Sweden. Since the scheme was implemented, reduced carbon emissions have been accomplished in parallel with stable economic growth.¹⁷

Green Buildings and a Green Construction Industry

The construction industry contributes at least 40% of the world's carbon dioxide emissions and around a third of the world's waste¹⁸. Buildings alone are estimated to contribute 23% of air pollution, 40% of drinking water pollution and 50% of landfill waste globally¹⁹. When considering the outsize footprint of the construction industry in Hong Kong, it is not hard to see that it is a significant local contributor to climate change and a major source of waste.

¹⁰ https://www.climateready.gov.hk/files/pdf/CAP2050_booklet_en.pdf, p.28-29 (last accessed 12 May 2022)

¹¹ https://www.climateready.gov.hk/files/pdf/CAP2050_booklet_en.pdf p.29 (last accessed 12 May 2022)

¹² <https://smartcitysweden.com/focus-areas/climate-energy-environment/waste-to-energy/> (last accessed 12 May 2022)

¹³ <https://nyti.ms/3vnrq1u> (last accessed 12 May 2022)

¹⁴ <https://smartcitysweden.com/best-practice/76/waste-incineration-at-hogdalenverket/> (last accessed 12 May 2022)

¹⁵ <https://nyti.ms/3vnrq1u> (last accessed 12 May 2022)

¹⁶ <https://www.scmp.com/business/companies/article/3132351/hong-kongs-renewable-energy-certificates-trading-reaches-002> (last accessed 12 May 2022)

¹⁷ <https://taxfoundation.org/sweden-carbon-tax-revenue-greenhouse-gas-emissions/#:~:text=rate%E2%80%9494EU%20ETS,-Sweden%20levies%20the%20highest%20carbon%20tax%20rate%20in%20the%20world,gas%20emissions%20by%2027%20percent>. (last accessed 12 May 2022)

¹⁸ <https://www.bbc.com/future/article/20211215-the-buildings-made-from-rubbish> (last accessed 12 May 2022)

¹⁹ [file:///C:/Users/scc03/OneDrive/Desktop/33---Impacts-of-Construction%20\(1\).pdf](file:///C:/Users/scc03/OneDrive/Desktop/33---Impacts-of-Construction%20(1).pdf) (last accessed 12 May 2022)

The Swedish construction sector has a good reputation for using bio-based materials and for a responsible approach recycling. For more than a decade, Sweden has been in the top ten of the globally respected Environmental Performance Index²⁰, championing clean air, water and low emissions through this green model by integrating business and sustainability²¹.

Sweden has a long history of recycling. Current recycling rates are 50-60% with only 10% of Construction and Demolition Waste (CDW) going to landfill²² (the average CDW landfill rate in Europe is around 30%²³). Additionally, a tradition of close collaboration between municipalities and producers has led to cost-efficiency in waste management. Recycling in the construction and real estate sector has been stimulated via a multi-pronged approach, including education, community efforts, and the promotion of investment in recycling technology.

We therefore propose that the government should:

- **Promote circularity and evaluate full life cycle impact for construction materials.** Hong Kong has made commendable efforts to reduce CDW, such as the Construction Waste Disposal Charging Scheme (CWDCS) implemented in 2005, which resulted in a reduction of waste to landfills by approximately 60% in the first year after its introduction.²⁴ However, approximately 25% of landfill waste in Hong Kong is still attributed to CDW²⁵. Ongoing major Infrastructure projects in the next 5 years are likely to exacerbate the problem.
- **Promote environmentally friendly consumption patterns.** A contributing factor to the CDW problem is the linear economic model, the so-called “take, make, and dispose” mindset. The “throw-away” culture that permeates most other industries is also evident in building and construction. Instead of focusing on quality products that will last for years, the focus in Hong Kong is often on products with short lifespans that ultimately end up in landfills. An example would be choosing a carpet with a 2-year lifespan as opposed to a longer-lasting timber floor with a 15+ year life span.
- **Evaluate usage of wood and bio-based materials in construction.** By using wood products instead of fossil materials when building houses, greenhouse gas emissions can be reduced by more than half.²⁶ Wood is a natural and truly renewable construction material with a very limited carbon footprint, since the growing tree absorbs carbon dioxide from the atmosphere. Carbon is stored in the wood product for the whole life cycle; upon demolition of a wooden house, the building materials can be reused, thus avoiding any landfill needs.

²⁰ <https://epi.yale.edu/epi-results/2020/component/epi> (last accessed 12 May 2022)

²¹ <https://dashboards.sdgindex.org/#/SWE> (last accessed 12 May 2022)

²² <https://publications.lib.chalmers.se/records/fulltext/254135/254135.pdf> (last accessed 12 May 2022)

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https://www.researchgate.net/publication/354776461_Complementing_circular_economy_with_life_cycle_assessment_Deeper_understanding_of_economic_social_and_environmental_sustainability (last accessed 12 May 2022)

²⁴ <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.976.8246&rep=rep1&type=pdf> (last accessed 12 May 2022)

²⁵ <https://www.epd.gov.hk/epd/misc/cdm/introduction.htm> (last accessed 12 May 2022)

²⁶ <https://www.pik-potsdam.de/en/news/latest-news/buildings-can-become-a-global-co2-sink-if-made-out-of-wood-instead-of-cement-and-steel> (last accessed 12 May 2022)

Green Transition of Hong Kong's Food System

The people of Hong Kong are among the world's biggest consumers of meat (pork, beef and chicken, not including fish or seafood), with the average person eating around 5.5 times the global average²⁷. The average consumption per day is 376 grams²⁸ compared to the recommended 350-500 grams per week by the World cancer research fund²⁹. In Sweden, the average daily consumption is about 220 grams.³⁰ Beef consumption was recently identified by Intergovernmental Panel on Climate Change (IPCC) as one of the areas where a scaled behavioural and cultural change of many can have a substantial impact on climate change.³¹

SwedCham thinks the time has come for Hong Kong to elevate food as an area in need of urgent action within the context of the territory's transition to a zero carbon economy, with the following proposed focal points:

- **Promote and advocate an increase of plant-based protein.** Plant-based diets have the potential to not only improve human health but also to reduce the environmental impact associated with high consumption of animal-sourced foods such as meat and dairy products³². The long-term effect on public health and healthcare costs of such a reduction would also bring benefits to the city. SwedCham would therefore like to promote a higher intake of plant-based protein. The choices for non meat-based proteins are abundant in Hong Kong these days, driven by many local products such as Tofu and Seitan as well as Swedish contributors such as Oatly and the meat free options available at IKEA..
- **Acknowledge and establish a framework for seafood certificates.** Since seafood is such an important part of Hong Kong's food culture and, in general, generates less carbon emissions than proteins from land animals³³, SwedCham would recommend the wide promotion of internationally recognized certifications of for sustainable seafood, including MSC³⁴ (certifies coherent management and measured implementation of responsible ocean fishery), and ASC³⁵ (certifies strict standards in the aquaculture industry). Adherence to the standards as demanded by the certificates can be implemented both through educating consumers and also as part of industry frameworks or incentives, both of which are worth exploring to transition to a more sustainable food system.

²⁷ <https://ourworldindata.org/grapher/meat-consumption-vs-gdp-per-capita> (last accessed 12 May 2022)

²⁸ <https://ourworldindata.org/grapher/meat-consumption-vs-gdp-per-capita> (last accessed 12 May 2022)

²⁹ <https://www.wcrf.org/whats-the-beef-conflicting-recommendations-for-meat-and-cancer-risk/> (last accessed 12 May 2022)

³⁰ <https://ourworldindata.org/grapher/meat-consumption-vs-gdp-per-capita?country=~SWE> (last accessed 12 May 2022)

³¹ <https://bloom.bg/3Kk20xb> (last accessed 12 May 2022)

³² <https://apps.who.int/iris/bitstream/handle/10665/349086/WHO-EURO-2021-4007-43766-61591-eng.pdf?sequence=1&isAllowed=y> (last accessed 12 May 2022)

³³ <https://oceana.org/blog/wild-seafood-has-lower-carbon-footprint-red-meat-cheese-and-chicken-according-latest-data/> (last accessed 12 May 2022)

³⁴ <https://www.msc.org/> (last accessed 12 May 2022)

³⁵ <https://www.asc-aqua.org/> (last accessed 12 May 2022)

Conclusion

SwedCham's Sustainability Committee calls on the Hong Kong Government to take firmer action to achieve a leading position among the advanced economies of the Asia Pacific region as part of the transition to a green economy. The roadmap to a Zero Carbon future could also be a launch ramp for new entrepreneurial companies that take advantage of a world-class business hub that is at the same time a leading promoter of sustainable policy initiatives.

Sweden and Swedish businesses are attracted by Hong Kong's unique location in Asia, and the key role the territory is set to play in the realisation of the Greater Bay Area, Swedish entrepreneurs are excited by the opportunity to support Hong Kong's transition, and believe Hong Kong "success stories" may serve as "proof of concept" for the rest of Asia.

The Sustainability Committee of the Swedish Chamber of commerce in Hong Kong May 2022

The Swedish Chamber of Commerce in Hong Kong – Promoting Swedish business and values in Hong Kong since 1986. By members for members.

SwedCham exists to advance the interests of Swedish business in Hong Kong. In this role, we build networks among corporations of all sizes, as well as between decision-makers and opinion leaders within Hong Kong and beyond. We advocate a fact-based approach to analysis and problem solving, supported by Swedish values. SwedCham HK has around 200 members including companies, individuals and young professionals.