Financing the expansion of the Hong Kong International Airport with a green bond is pure greenwashing

The Hong Kong Airport Authority issued on January 6th a USD$4 billion multi-tranche bond to finance the expansion plans of Hong Kong International Airport. Part of this included a 5-year green tranche of US$1.0 billion. While the 'Sustainable Finance Framework' has already been accredited by the Hong Kong Quality Assurance Agency (HKQAA), as well as Morningstar subsidiary Sustainalytics, the green credentials of the project lack credibility. Not only an expansion of airport capacity is incompatible with reaching the objectives of the Paris Agreement, but also its construction is set to cause severe environmental damage - especially for the threatened Chinese White Dolphin.

1. Aviation’s impact on climate change

- Aviation CO₂ emissions accounted for around 2.5% of total CO₂ emissions in 2018 - including emissions from agriculture, forestry and other land uses - and it is expected to increase despite COVID 19.
- Aviation also accounts for 12% of emissions from transport, according to Air Transport Action Group.
- Air traffic growth caused an increment of 42% of CO₂ emissions between 2005 and 2019, even considering the continuous improvements in aircraft fuel efficiency.
- Global aviation’s impacts on climate change also come from non-CO₂ sources. Despite the lack of consensus on a metric to describe these impacts, some estimations show that in 2018 the share of the non-CO₂ effects over radiative forcing was twice as high as that of CO₂ alone.
- A recent study from the University of Oxford, Manchester Metropolitan University and the NERC National Centre for Earth Observation, concluded that aviation sector could consume up to a sixth of the remaining temperature budget required to limit warming to 1.5°C by 2050 when accounting for the CO₂ and non-CO₂ effects.
- Despite democratizations efforts, only 1% of the world population was responsible of 50% of aviation emissions in 2018. While 10% of world population uses the plane at least once a year, 80% of world population has never taken a plane.
- A study by the Shift Project that analyzed two scenarios of decarbonization of the aviation sector through technology shows that no realistic path can lead to the goal without reducing traffic growth. To achieve an effective decarbonization aligned with a 2°C, the study concluded that not only low-carbon technologies would be needed, but also the adjustment of air traffic to the rhythm of their deployments.
- Indeed, the large-scale use of low-carbon fuels for the aviation sector is still under development and there is risk of undersupply. Moreover, its use must be treated with caution since non-CO₂ climate impacts of these alternative fuels are less well-understood. Similarly, fuel efficiency has limited impact
as past progress in efficiency was overcompensated by air traffic growth and efficiency potential is limited.

2. **Overview of aviation sector’s participation in the green bonds market**

- After the first issuance of a green bond by an airport group in 2016 by the Mexico City Airport Trust, green bond issuance in the aviation sector has been slow. Until now there are 5 airport companies identified as issuers of green bonds: Mexico City Airport Trust, Royal Schiphol Group, Swedavia, Aeroporti di Roma Group, and Incheon International Airport Corporation.

- In all these cases, the funds will be used in a very similar way. All of them refer mainly to installations and infrastructures in the airports: renewable energy to supply the airports’ needs, clean ground transportation – such as electric buses and charging stations - , green buildings, energy efficiency and waste management. Royal Schiphol Group (in the 2020 update of its framework) and Incheon International Airport Corporation included the possible use of the funds in investments to facilitate sustainable aviation fuels and biofuels.

- Most importantly, all aforementioned bonds allow the possibility of increasing airport capacity.

- The incompatibility between green bonds and the aviation sector, is best demonstrated with an example. In its progress report 2019, Royal Schiphol group declares using the proceeding of its green bonds issuance to finance the refurbishment and construction of new buildings, as well as electric busses and the corresponding charging stations and infrastructures. However, Amsterdam Schiphol airport’s passenger-related emissions are currently the equivalent to the yearly emissions from 2 coal plants, according to Airport Tracker.

- While investors often rely on SPOs to assess the credibility of the green bonds, SPOs for these green bonds failed to provide an analysis of the climate alignment of the airports. All of them, with exception of Swedavia’s SPO provided by Cicero, mentioned that even if the aviation sector is highly polluting, discussing that is out of the scope of their assessment.

3. **The negative impacts of the expansion plans of Hong Kong International Airport**

- The Airport Authority Hong Kong announced the expansions plans of the Hong Kong International Airport (HKIA) through the “three-runway project” since 2012.

- The magnitude of the expansion will be the equivalent to building a new airport next to the existing one. Indeed, the project will increase HKIA’s passenger capacity to 120 million per year and freight capacity to 10 million tonnes annually. As a comparison, the airport currently emits the equivalent to the yearly CO₂ emissions from 3 coal plants from passenger-related emissions, according to Airport Tracker.

- Starting in 2016, it is reported that the construction of the “three-runway” has recently been completed but the construction of other facilities, such as a new terminal and passenger concourse would be finished until 2024.

- As the expansion project required reclaiming approximately 650 hectares of land north of the existing airport island, this has caused several environmental damages: solid waste; water, noise and air pollution; obstructing the travelling corridor of Chinese White Dolphins; and impacting the habitat of other marine species, such as corals.
Explanatory note about Hong Kong International Airport’s Green Bond – January 2022

- Several NGOs such as Friends of the Earth, The Hong Kong Dolphin Conservation Society (HKDCS), the Conservancy Association and WWF Hong Kong denounced in 2014 deep concerns about the effectiveness of the mitigation measures proposed by the Airport Authority Hon Kong, especially in regard to the protection of the Chines White Dolphins and air quality.

- The Chinese White Dolphins – also called pink dolphins - are currently listed in Annex I (the highest protection level) of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITIES) and are a species threatened with extinction.

- HKIA’s mitigation measures include the designation of a 2,400-hectare marine park in north Lantau waters, however the establishment of such park is planned for 2023. Too late for the dolphin population that were already suffering from various threats even before the third-runway project started and with this large-scale reclamation project making it worse. In Hong Kong, their number have dropped by more than 80% in the past 15 years. Indeed, in 2020 it was reported that estimates indicate an average of just 32 Chinese white dolphins left in Hong Kong’s waters.