BUSINESS ENVIRONMENT COUNCIL
商界環保協會

HONG KONG SUSTAINABLE AVIATION FUEL COALITION
香港可持續航空燃油聯盟

Sustainable Aviation Fuel Strategy for Hong Kong

Policy Whitepaper prepared by
Business Environment Council Limited

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Content

Executive Summary

As a backbone to mobility and connectivity of Hong Kong, the aviation sector has been a key driver of the economic prospects and international reputation of the city. To further distinguish the jurisdiction in an increasingly competitive landscape focused on sustainable aviation, it is crucial to align with the vision set by international aviation regulatory bodies and the Hong Kong SAR Government to achieve net-zero carbon emissions or carbon neutrality by 2050. A proactive approach to aviation decarbonisation is essential, with the adoption of Sustainable Aviation Fuel ("SAF") as a key strategy.

The success of scaling up SAF relies heavily on the collaborative efforts of both the municipal and the business sectors, in which the public sector plays a fundamental role by offering supportive administration frameworks and financial incentives. These strategic measures are instrumental in overcoming investors' apprehension and cultivating genuine demand within the commercial sector, hence accelerating the jurisdiction's progress towards a decarbonised aviation industry.

Leading economies typically employ two principal strategies to address the uptake of SAF. For instance, the United States prioritises leveraging its SAF supply capabilities through financial incentives for SAF blending and production. In contrast, authorities in Europe and Singapore focus on demand-driven measures, by implementing mandates and levies respectively, giving clear economic signals that drive engagement in the SAF market. In mainland China, Civil Aviation Administration of China's ("CAAC") 14th Five-Year Plan ("FYP") for Green Civil Aviation Development published a goal to raise SAF consumption to over 20,000 tons in 2025 and cumulatively to 50,000 tons during the 14th FYP period.

As Hong Kong advances towards the adoption of SAF, it is vital to develop a tailored uptake blueprint that aligns with the city's socio-economic interests. A clear directional framework involving government-centralised leadership is essential to address the prevailing vagueness surrounding SAF prospects, thus empowering a broader SAF value chain to embrace the green transition with confidence. Besides, provisional financial subsidies and subsequent sustainable financing mechanisms can enable an industry-wide adoption of SAF, which is currently costly yet vital for decarbonisation.

To effectively drive the local adoption of SAF, Business Environment Council Limited ("BEC") launched a programme in January 2024 called the Hong Kong Sustainable Aviation Fuel Coalition ("HKSAFC"). One of the aims of the programme is to deliver a whitepaper with SAF strategies that would support the aviation industry to upscale SAF development in Hong Kong. This whitepaper recommends that the Government take strategic actions in terms of three important pillars. The pillars are set to align the socio-economic interests of both policymakers and the industry, thereby maintaining Hong Kong's position as the international aviation hub amid regional competitions. Below policy recommendations are categorised as prompt action, near-term action and continuous review based on their urgency levels.

01 Setting up of Government-led multi-stakeholder working group

To eliminate the policy uncertainty, BEC advocates for Government-led cross-sector initiatives to drive the development and adoption of SAF. Efforts and collaboration from various government bureaus and departments are essential for the successful implementation of SAF uptake policies. For one thing, central leadership is vital to coordinate these efforts effectively. The top-level management is hence required to demonstrate commitment and mobilise the stakeholders to drive policy changes forward. BEC stresses the need for a holistic approach from the Hong Kong Government, urging the establishment of a Government-led multi-stakeholder working group to spearhead SAF deployment. This collaborative effort would involve Government agencies, industry stakeholders and experts to formulate comprehensive strategies and policies for effective SAF usage promotion. For instance, the UK Jet Zero Council demonstrates pragmatic directions the municipal may take reference. The working group should consider implementing the following actions under the specific timeframe.

Prompt Action

01	**Establish SAF Uplift Blueprint and Measurable Goals**	A Government-led multi-stakeholder working group is recommended to be established promptly to spearhead SAF adoption efforts in the city. The multi-stakeholder working group should outline a SAF development blueprint, which will offer a clear direction for the aviation industry and stakeholders, as well as encourage related investment. Measurable goals, such as a SAF usage target, should also be set for increasing SAF usage, guiding investments and fostering innovation in sustainable aviation practices, ensuring a structured approach to reduce carbon emissions in the aviation sector.
02	**Conduct Dialogues with Mainland Authorities on SAF Uplift Strategies**	The working group should also engage in cross-border dialogues with the mainland authorities on SAF prospects, fostering regional collaborations and knowledge exchange. Through exploring various opportunities for SAF development and deployment across borders, the city can enhance its position as a hub for sustainable aviation activities, fostering production and supply partnerships and synergies.
03	**Raise Public Awareness on SAF Transition**	The working group should work on raising public awareness on the green fuel transition to SAF, to garner support and understanding among citizens. Educating the public about the benefits of SAF, their role in climate action and the importance of sustainable aviation practices can lead to greater acceptance and demand for eco-friendly travel options, thus encouraging airlines to prioritise SAF adoption to meet consumer expectations.

Continuous Review

01

Ensure Continuous Monitoring Mechanism on SAF Development

BEC recommends the working group to set up effective continuous monitoring mechanism. Continuous monitoring of SAF usage progress is pivotal for tracking implementation effectiveness and identifying potential fallacies. Regular monitoring allows the working group to assess the impact of SAF initiatives, address challenges promptly and adapt relevant strategies to ensure a successful integration of sustainable aviation practices in Hong Kong. Through robust monitoring, the working group can maintain accountability, drive momentum and facilitate a dynamic approach towards achieving SAF usage targets and environmental objectives.

02

Review the Need for Establishing More Stringent Measures such as a Mandate on Departing Flights to Further Incentivise Decarbonisation

As the SAF demand is gradually driven along with SAF uplift targets and policy development, the working group should regularly evaluate progress and could consider the implementation of more stringent measures to regulate SAF adoption. Drawing inspiration from effective strategies in other regions, a potential avenue for enhancement involves introducing mandate on departing passenger flights to drive decarbonisation efforts. It would require that all fuel supplied to departing passenger flights meets specific criteria for reducing carbon emissions. If the working group considers mandate establishment, exploring the feasibility of a local tradeable certificate scheme could provide assistance to fuel suppliers in meeting their obligations. Such certificate scheme would support local trading, ensure all SAF usage is within Hong Kong, contributing to the required SAF uplift percentage in the fuel supplied to Hong Kong.

02 Provision of Government Subsidies and Implementation of Levy for Enhancing SAF Demands

It is imperative for the Government to provide financial support for the uplift of SAF to accelerate the transition to greener aviation practices. In fact, the industry finds it challenging to cover the high price premium between traditional jet fuel and SAF without fiscal support. SAF is two to five times more expensive than regular jet fuel. The Government should consider implementing the below recommended financial support actions dedicated to SAF procurement and development to secure SAF demand and help absorb the high price premium.

Prompt Action

01	**Provide Provisional Government Subsidies**	Robust financial support helps realise the local aviation decarbonisation journey. Significant seed investments should be made as a prompt action to leverage the city's capability to develop and refine this new energy transition process. Notably, the financial subsidies should focus on alleviating the procurement burden. The measure is crucial to clarify the prospects for the local SAF market and facilitate initial access to SAF, which comes with much higher price premium.
02	**Provide Research Fund on SAF Innovation and Application**	The Government should consider establishing a research fund dedicated to SAF research, so to encourage innovation, drive technological progress, foster collaboration, address barriers to SAF adoption, inform policy-making and contribute to sustainable aviation practices via pioneering research with local Hong Kong relevance.
03	**Conduct Feasibility Study on SAF-related Levy Scheme**	The Government should conduct a feasibility study on SAF-related levy collection and allocation mechanisms. The objective of such a study is to ensure a comprehensive understanding of the potential costs, benefits and feasibility of the levy on stakeholders. By analysing market readiness, cost implications, supply chain dynamics and regulatory frameworks, the Government can make informed decisions that minimise risks and maximise the effectiveness of a levy mechanism.

Near-term Action (One to two years)

01

Develop Levy Allocation Mechanism

BEC recommends Hong Kong Government in the near-term (within one to two years) to establish a levy allocation mechanism to effectively achieve the goal of encouraging increased adoption of SAF by ambitious airlines, while also considering its impact on the competitiveness of the Hong Kong International Airport ("HKIA") as a leading international aviation hub. The levy system should be structured to incentivise airlines based on their SAF procurement levels, with greater uptake of SAF translating into enhanced levy benefits. However, without careful design, this approach could potentially provide competitive advantages to airlines that already have established SAF supply chains, posing challenges for smaller airlines with lower fuel volumes. Therefore, there is a need to study how varying levy allocation arrangements could promote a more equitable environment. It is crucial for the Government to conduct thorough research to strike a balance in this regard.

02

Implement Levy on Passengers Departing from Hong Kong

With the levy allocation mechanism that is most suitable for Hong Kong designed, BEC recommends implementation of levy collection, on passengers departing from Hong Kong at the early phase to ensure the proposed actions are financially sustainable. This passenger levy would help alleviate the emerging pressure on public resources and incentivise SAF adoption. Noteworthy, the charging arrangement should exempt travellers transiting through Hong Kong in its early phase of implementation to maintain the city's competitiveness as an international aviation hub. Future reviews can consider potential levy consideration on cargo and transit flights.

03 Development of Local SAF Blending Capacity

A local SAF blending facility can offer increased flexibility by enabling the import of neat SAF and to blend it locally. This not only enhances accessibility to SAF but also potentially reduces costs, providing another economically viable option. The Government should consider implementing these recommended prompt and near-term actions to facilitate the establishment of local SAF blending capacity in Hong Kong.

Prompt Action

01 Facilitate Necessary Arrangements for Neat SAF Import

The Hong Kong Government is recommended to facilitate the necessary administrative arrangements, akin to recent shipping bill amendments, which can streamline the import process of SAF into Hong Kong. Establishing clear administrative protocols of operational arrangements will be instrumental in ensuring the smooth import of SAF, enhance the efficiency and compliance of SAF import processes, thus aligning with global standards and regulatory requirements, as well as the forthcoming national standards and regulatory requirements.

02 Conduct Feasibility Studies on the Construction of SAF Blending Tank in Hong Kong

BEC recommends the Government to promptly conduct studies on the feasibility of constructing an SAF blending tank in Hong Kong. While demand for local SAF increases with available incentives, a stable SAF supply must also be available to support the city's decarbonisation efforts. One straightforward arrangement is to construct a neat SAF storage tank and blending tank. Provision of such infrastructure is instrumental as this sends a strong signal to the aviation industry that Hong Kong is committed to providing SAF. BEC believes there are certain commercial interests in the SAF blending business, should the Government indicate possibility.

Near-term Action

01 Facilitate Establishment of Neat SAF Storage and SAF Blending Facility

Through study findings and results of stakeholder engagement discussions, the Government is recommended to subsequently facilitate the establishment of neat SAF storage tank(s) and SAF blending tank(s), with the related stakeholders in the industry involved.

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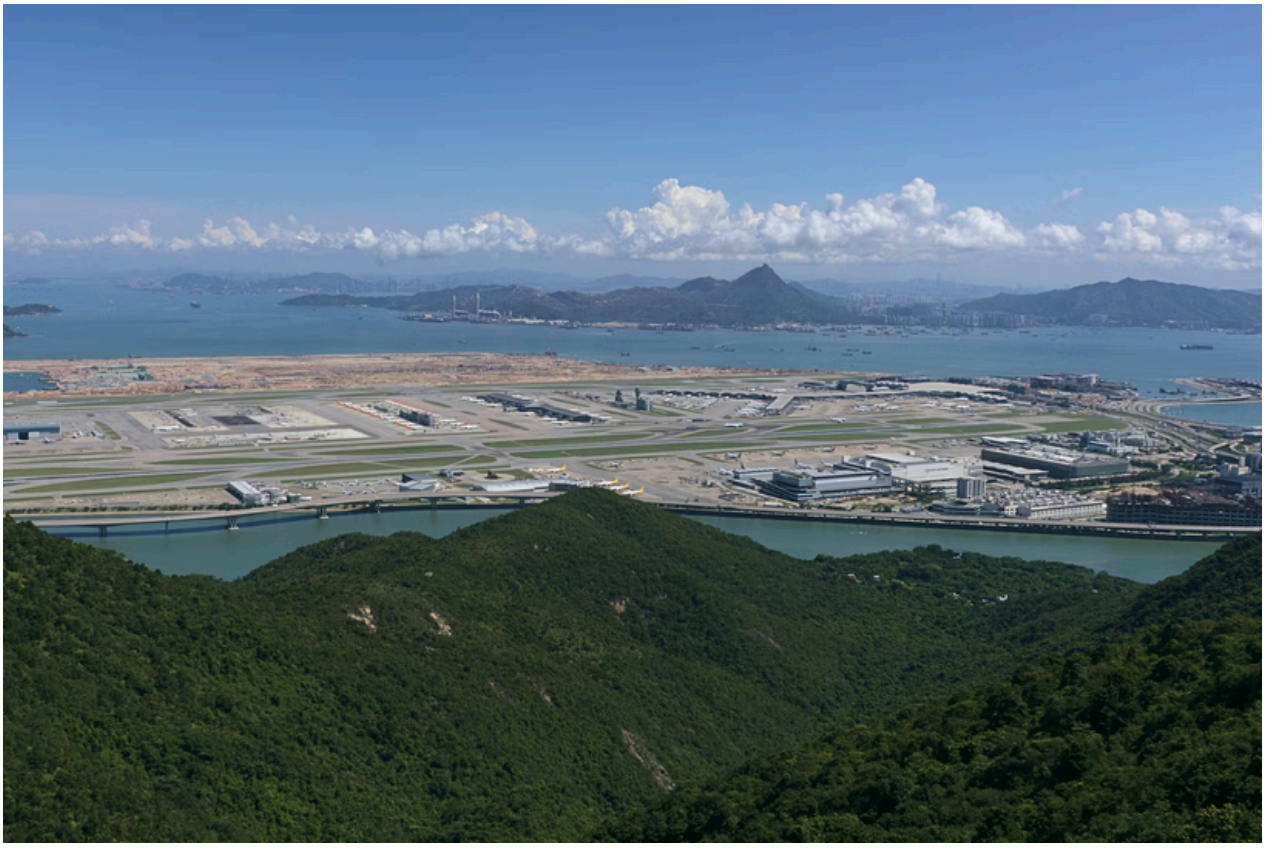
Introduction



As a leading global aviation hub, Hong Kong has a pivotal role to play in driving the adoption of SAF to mitigate the environmental impacts borne by the industry. The aviation sector is a key contributor to the economic prosperity and international standing of the city, accounting for a significant portion of Hong Kong's GDP, hence serving as a critical gateway for global trade and tourism. As such, the aviation industry bears a crucial responsibility in aligning its operations with global sustainability objectives, not only to address the environmental implications, but also to solidify the competitiveness and leadership position of Hong Kong in the international aviation landscape.

The benefits of embracing SAF technology are manifold for the aviation industry of Hong Kong and the city itself. By transitioning to SAF, airlines operating within the city can significantly reduce their carbon footprint, enabling them to meet increasingly stringent emissions regulations and bolster their sustainability credentials. International Civil Aviation Organization ("ICAO") has announced its global aspirational vision: to reduce carbon dioxide emissions in international aviation by 5% by 2030 through the use of SAF and other solutions. Airlines are required to fulfil the carbon reduction obligations of the Carbon Offsetting and Reduction Scheme for International Aviation ("CORSIA"), under which the usage of SAF is the major contributor. Without SAF, the whole industry would not be able to fulfil such carbon offset target by 2050. The adoption of SAF in Hong Kong would thus enhance the competitiveness of Hong Kong's aviation hub in the global market, solidifying its reputation as a responsible and forward-thinking transportation centre. Moreover, the adoption of SAF would position Hong Kong as a regional leader in sustainable aviation, setting an example for other major hubs to emulate.

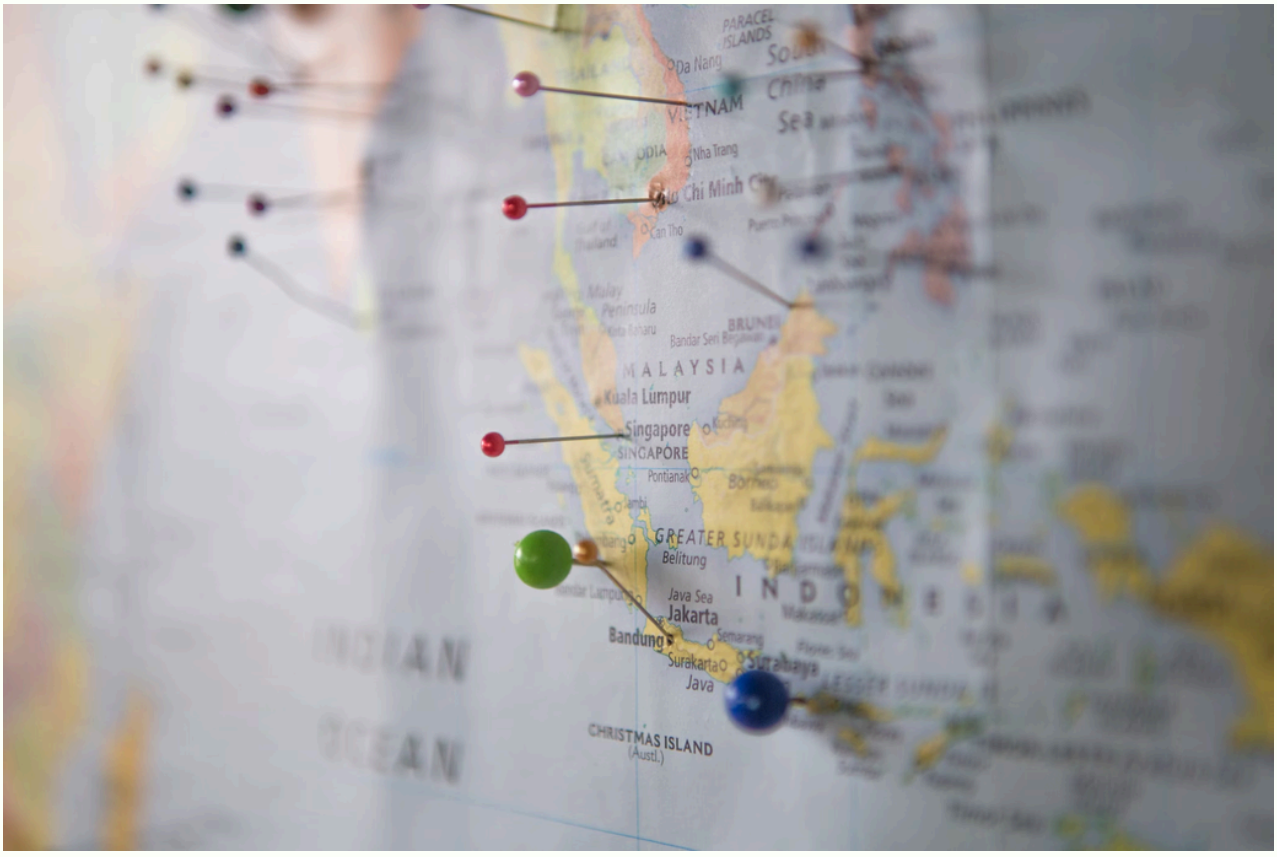
Beyond the environmental benefits, the widespread use of SAF in Hong Kong's aviation industry would also yield significant economic advantages. The increased demand for sustainable fuels would foster the development of a robust SAF supply chain, creating new business and employment opportunities within the city. Additionally, the status of Hong Kong as a global leader in sustainable aviation would attract foreign investments and overseas talents, further strengthening the position of the city as a premier international aviation hub. This, in turn, would have a ripple effect, benefiting the broader Hong Kong economy through increased trade and tourism.

However, the successful transition to SAF in Hong Kong's aviation landscape hinges on collaborative efforts between the Government and industry partners to establish a supportive policy framework and financial mechanisms that effectively address barriers hindering the widespread adoption of this crucial technology. Access to essential resources and enablers, including vital financial support, is pivotal for industry players to transition to SAF and drive decarbonisation efforts. Without proactive Government support, Hong Kong's aviation sector may struggle to surmount challenges related to SAF procurement and integration, potentially placing the city at a disadvantageous position as compared to hubs actively promoting sustainable fuel usage. Collaborative engagement between the Government and the aviation sector is key to unlocking the full potential of SAF technology and reinforcing Hong Kong's position as a regional and global leader in sustainable aviation.

In recognition of this challenge, Business Environment Council Limited (“BEC”) launched a programme called the Hong Kong Sustainable Aviation Fuel Coalition (“HKSAFC”) in January 2024, with the support from other stakeholders representing the holistic SAF supply chain. Through understanding different approaches adopted in other countries and engaging stakeholders for their views on the possible ways out for mainstreaming SAF in Hong Kong, BEC has gathered valuable insights to inform policy recommendations aimed at fostering a conducive business environment for the widespread adoption of SAF in Hong Kong.

This whitepaper will provide a clear and compelling case for decisive policy measures and financial incentives necessary to overcome the cost barriers and catalyse the mainstreaming of SAF within the aviation ecosystem of Hong Kong. We envision that by implementing these recommendations, the Hong Kong Government can position the city as a regional and international leader in sustainable aviation, solidifying its status as a globally connected, responsible, and forward-thinking transportation hub.

SAF Development Strategies in Different Regions



2.1 Research method

A comprehensive online market research was conducted to analyse the current global SAF landscape and policy developments. This research aimed to elucidate how other jurisdictions employ policies and Government-led strategies to mainstream SAF development. The findings revealed that these strategies primarily fall into two categories, focusing on ensuring supply and demand of SAF.

2.2 SAF practice in different regions

2.2.1 United States

In the United States ("US"), the national SAF strategy centres on enhancing the availability of SAF in the market to facilitate its supply to airlines at a more competitive pricing. While the utilisation of SAF remains voluntary among airlines, the increasing emphasis on corporate sustainability commitments and international aviation sector standards provides strong incentives for airlines to opt for SAF sourced from the US. The US Government has implemented two core strategies to support SAF production.

To incentivise SAF production, the US Government introduced SAF credits. Producers of SAF can benefit from tax credits established under the Inflation Reduction Act, amounting to US$1.25 (HK$ 9.74) to US$1.75 (HK$13.64) per gallon based on achieved greenhouse gas ("GHG") emission reductions. This credit is applicable to qualified fuel mixtures containing SAF for specific sales or uses in the calendar years 2023 and 2024 [1]. Additionally, a forthcoming Clean Fuel Production Credit mechanism effective from 2025 will offer tax credits specifically for low-emission transportation fuels, including SAF, qualifying for a US$0.35 (HK$2.73) per gallon tax credit [2].

Last year, the US Government launched the Fuelling Aviation's Sustainable Transition ("FAST") grant programme through the Federal Aviation Administration ("FAA") with a focus on achieving net-zero GHG emissions by 2050. This initiative earmarks US$244.5 million (HK$1.91 billion) in grants to support SAF-related infrastructure projects encompassing production, transportation, blending, and storage [3].

2.2.2 Singapore

Singapore is set to enforce a SAF target for departing flights, starting from 1% in 2026 and escalating to 3 to 5% by 2030 [4]. To bolster this target, the country will introduce a fixed levy on aviation activities commencing in 2026. The levy amount will be determined based on the SAF target and the projected SAF price at that time. Collected funds will be allocated towards procuring SAF to ensure a consistent supply aligned with prevailing market dynamics. The levy structure ensures the availability of SAF irrespective of market fluctuations.

Moreover, the volume of SAF uplift will be adjusted according to the predetermined levy and prevailing SAF prices, guaranteeing a steady supply regardless of market variations. The Singapore levy will exclusively apply to departing travellers, exempting transit passengers to maintain Changi Airport's competitiveness as an international transit hub. Future plans include extending the SAF levy to cargo, with airlines bearing the responsibility of payment for cargo SAF [4].

2.2.3 South Korea

South Korea has announced that tax breaks and other incentives will be provided to local refiners to invest in SAF, so as to lower their development and production costs. The Government also announced on 30 August 2024 that a mandate of 1% blended-SAF has been imposed on all departing international flights starting from 2027 [5].

2.2.4 United Kingdom

In the United Kingdom (“UK”), there will be a binding mandate on SAF uplift starting 2025 as shown in the table. In addition, the Government implements a cap on Hydrotreated Esters and Fatty Acids (“HEFA”) and a progressive demand mandate for Power-to-Liquid (“PtL”). This aims to create space for developing newly advanced SAF technologies, which will subsequently encourage robust investment and mitigate the risk of diverting HEFA fuels from existing road transport usage. PtL offers a comparatively greater carbon reduction than HEFA, with progressive targets set from 2025 to 2040. This HEFA mandate consists of 100% HEFA to be used for blending of SAF in 2025 and 2026, decreasing to 71% of SAF in 2030 and 35% of SAF in 2040.

Table 1 UK SAF Mandates [6]

	2025	2030	2035	2040
SAF minimum	2% of total jet fuel	10% of total jet fuel	15% of total jet fuel	22% of total jet fuel
HEFA cap (starting in 2027)	2% of total jet fuel	7.1% of total jet fuel	7.8% of total jet fuel	7.8% of total jet fuel
PtL minimum obligation (starting in 2028)	0% of total jet fuel	0.5% of total jet fuel	1.5% of total jet fuel	3.5% of total jet fuel

In addition to the HEFA cap, the UK Government plans to introduce a buy-out mechanism for both the total SAF obligation and the PtL obligation. This mechanism provides a compliance avenue for suppliers unable to secure a SAF supply. The buy-out prices are set at £4.70 per litre for the main obligation and £5.00 per litre for the PtL obligation, acting as significant incentives for SAF supply in the UK market. These measures are structured to encourage SAF provision over opting for the buy-out option and establish a maximum cost for the scheme, ensuring that GHG emissions reductions are achieved at a reasonable cost [7].

Furthermore, the UK Government is preparing to launch a tradeable certificate scheme overseen by the UK Department of Transport. This scheme aims to reward the supply of SAF based on GHG emissions reductions. Fuel suppliers can use these certificates to meet their SAF mandate obligation or sell them to other suppliers. To qualify for the certification, SAF products must adhere to rigorous sustainability criteria, including being derived from residual waste or residue biofuel, recycled carbon fuel (“RCF”), low carbon hydrogen, or PtL fuel [6].

The mentioned SAF supplied must be utilised in UK aviation and complied to meet a minimum GHG emissions reduction threshold of 40% [6], compared to the 65% threshold under the UK Emissions Trading Scheme (“ETS”).

2.2.5 European Union

The European Union has proposed binding regulations on aviation fuel suppliers and entailing specific blending targets, as shown in below table.

Table 2 EU SAF Binding Regulations [8]

Mandate year	SAF uplift percentage	Synthetic aviation fuels sub-mandate
2025	2%	N/A
2030	6%	1.2% (2030 to 2031) 2% (2032 to 2034)
2035	20%	5%
2040	34%	10%
2045	42%	15%
2050	70%	35%

Additionally, the Union made a revision to the Energy Taxation Directive (“ETD”) in 2021, regulating fuels to be taxed based on their energy content and environmental performance rather than their volume under the Energy Taxation Directive. This approach ensures that the environmental impact of each fuel is more accurately reflected, aiding businesses and consumers in making cleaner, comparatively more climate-friendly alternatives [9].

Moreover, adjustments to the Emission Trading System are proposed. The EU ETS revisions established a reinvestment mechanism that allocates 20-million allowances for aircraft operators to offset the higher cost of SAF production. These allowances will be available from 2024 to 2030 and originate from the designated pool of European Aviation Allowances [10]. Aircraft operators may allocate the subsidies to cover between 50% and 100% of the cost difference between fossil kerosene and SAF, depending on the fuel pathway used [11].

2.3 Mandates / Targets

Many major jurisdictions actively promoting SAF uptake have established SAF targets or adopted regulatory frameworks to ensure that flights incorporate a specific amount of SAF. To assist the aviation industry in meeting these targets, or to fulfil the mandate requirements, most studied governments have introduced various initiatives or industry-supporting mechanisms.

2.3.1 SAF Targets

The following table summarises a list of SAF-related targets, categorised based on their timelines as short-term, mid-term, and long-term targets.

Table 3 SAF Targets in Different Jurisdictions

Country	Short-term	Mid-term (target within 10 years)	Long-term
Singapore [13]	1% from 2026	3 to 5% in 2030	N/A
India [14]	1% by 2025 (only domestic flights)		
Malaysia [12]	1%		Target: up to 47% by 2050
Thailand [15]	1% in 2026 2% in 2027 to 2029	3% in 2030 to 2032 5% in 2033 to 2035	8% in 2036 to 37
Japan [16]		10% in 2030 (for international flights using Japanese airports)	
South Korea [5]	1% from 2027		
EU [8]	2% by 2025	6% by 2030 20% by 2035	34% by 2040 42% by 2045 70% by 2050
UK [6]	2% by 2025 (flights taking off from the UK)	10% by 2030 (flights taking off from the UK)	22% by 2040 (flights taking off from the UK)
Netherlands [17]		Considering a 14% share of SAF by 2030	
France [18]	1% from 2022		

The establishment of short-term, mid-term, and long-term mandates serves distinct purposes in advancing SAF adoption. Short term mandates, typically targeting an uptake of 1 to 2%, enable countries to evaluate the impacts of the policy, facilitating adjustments when aiming for higher commitments in the mid-term. Mid-term mandates reflect a country's ambitions regarding SAF, considering factors like the required SAF volume, economic conditions, and supply availability. Setting long-term mandates can be challenging due to evolving technologies; however, they can offer reassurance to supply chain stakeholders and investors, potentially leading to improved pricing through securing long-term supply agreements.

2.3.2 Greenhouse Gas Reduction Mandate

Instead of requiring a specific percentage of SAF blend, some countries set GHG reduction targets for fuel supply. For example, the Swedish Government has introduced a mandate aimed at reducing GHG emissions in gasoline, diesel, and aviation fuel. Fuel suppliers are required to annually decrease the GHG emissions from these fuels by a specific percentage through the utilisation of biofuels in their blends. This GHG reduction mandate aligns with the national objective of achieving a 70% reduction in GHG emissions from domestic transport by 2030, relative to the levels recorded in 2010.

2.4 Summary

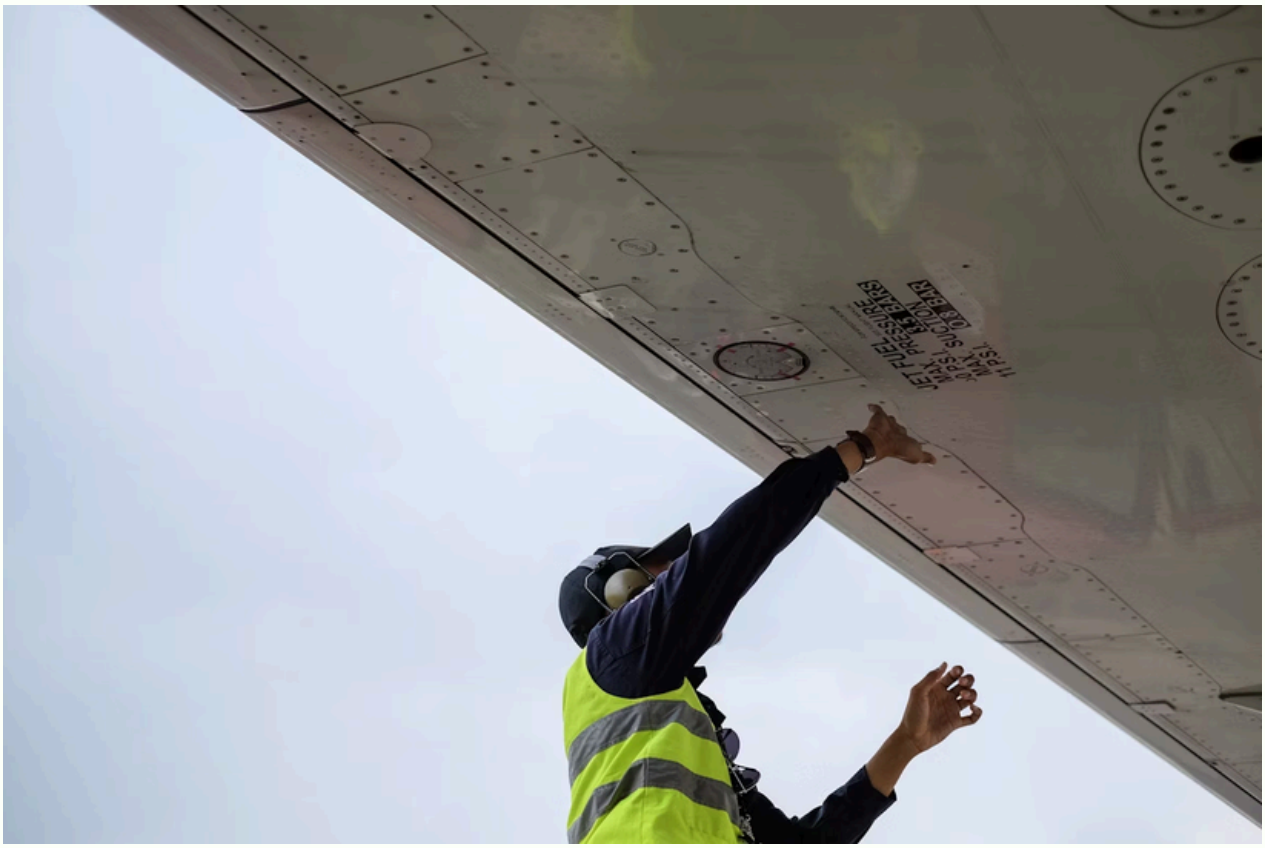
When comparing the mechanisms of the US, EU, and Singapore, the US focuses on maintaining SAF production without clear regulations regarding its use in airports or airlines. In contrast, the EU Commission mandates that fuel suppliers deliver a certain amount of blended SAF to EU airports. Additionally, the EU aims to create a reserve of 20 million allowances by 31 December 2030, incentivising the transition of aircraft operators away from fossil fuels. On the other hand, Singapore requires all outbound planes to use SAF, implementing a levy mechanism as an alternative funding approach that operates independently of government budgets.

Unlike the EU and the US, Singapore takes a distinct approach to provide financial support for SAF. Instead of direct funding, Singapore will introduce a fixed levy on aviation activities beginning in 2026. This levy will be determined based on the SAF target and projected prices at the time. The funds collected through the levy will be allocated towards the procurement of SAF, ensuring a consistent supply that aligns with prevailing market prices. By adjusting the volume of SAF uplift in accordance with the predetermined levy and prevailing SAF prices, Singapore can maintain supply consistency despite market fluctuations.

Table 4 SAF Strategies Adopted by the Four Selected Jurisdictions

	United States	United Kingdom	Singapore	European Union
Target				
Short-term		**2025** 2% SAF blending	**2026** 1% SAF blending	**2025** 2% SAF blending
Mid-term	**2030** 3 billion gallons of SAF Production	**2030** 10% SAF blending	**2030** 3 to 5% SAF blending	**2030** 6% SAF blending **2035** 20% SAF blending
Long-term	**2050** 35 billion gallons of SAF production	**2050** 22% SAF blending		**2040** 34% SAF blending **2045** 42% SAF blending **2045** 70% SAF blending
Policy Framework				
Policy to support financing SAF	**2022** Grants to support infrastructure projects related to SAF production, transportation, blending, and storage **2023** Tax credits under the Inflation Reduction Act **2025** Clean Fuel Production Credit	**2026** Designing a revenue certainty mechanism to support a UK SAF industry	**2026** SAF Levy. The levy amount will be determined based on the SAF target and projected SAF price, with funds allocated to SAF procurement	**2024** EU ETS revisions create a re-investment mechanism that sets aside 20 million allowances
Others	Certification of Sustainability Requirements	HEFA cap & PtL minimum obligation Tradeable certificate scheme		Synthetic aviation fuels sub-mandate Emission Trading System Taxation rate changed from volume-based to energy-based

Pain Points of Developing SAF in Hong Kong



BEC interviewed stakeholders in the aviation industry to understand the views and perspectives of the Partners on the development of SAF, so as to identify pain points for the sector to move forward and accelerate SAF uptake. Through comprehensive stakeholder engagement exercises, the critical pain points hindering the upscaling of SAF adoption in Hong Kong are identified. Stakeholders have stressed three overarching challenges that demand immediate attention to accelerate the transition towards sustainable aviation practices in the region. Below is a summary of the key pain points identified to upscale SAF in Hong Kong.

3.1 Lack of Economic Signals

One of the primary challenges highlighted by stakeholders is the absence of clear economic signals and policies governing the adoption of SAF in Hong Kong. Relevant stakeholders identified policy uncertainty as a significant barrier to promoting SAF in the region. Notably, the ambiguity surrounding financial incentives and regulatory frameworks creates uncertainties for businesses, hindering their willingness to embrace green aviation fuel solutions. As such, the rapid progress in low-carbon alternatives exacerbates financial risks, leading to proposed SAF projects being regarded as "un-bankable" or "un-financeable." The significant initial investment required for SAF projects further complicates financing, with uncertain returns deterring potential investors. Establishing clear economic signals and supportive policies are crucial to fostering an environment conducive to the upscaling of SAF initiatives.

3.2 High Price of SAF

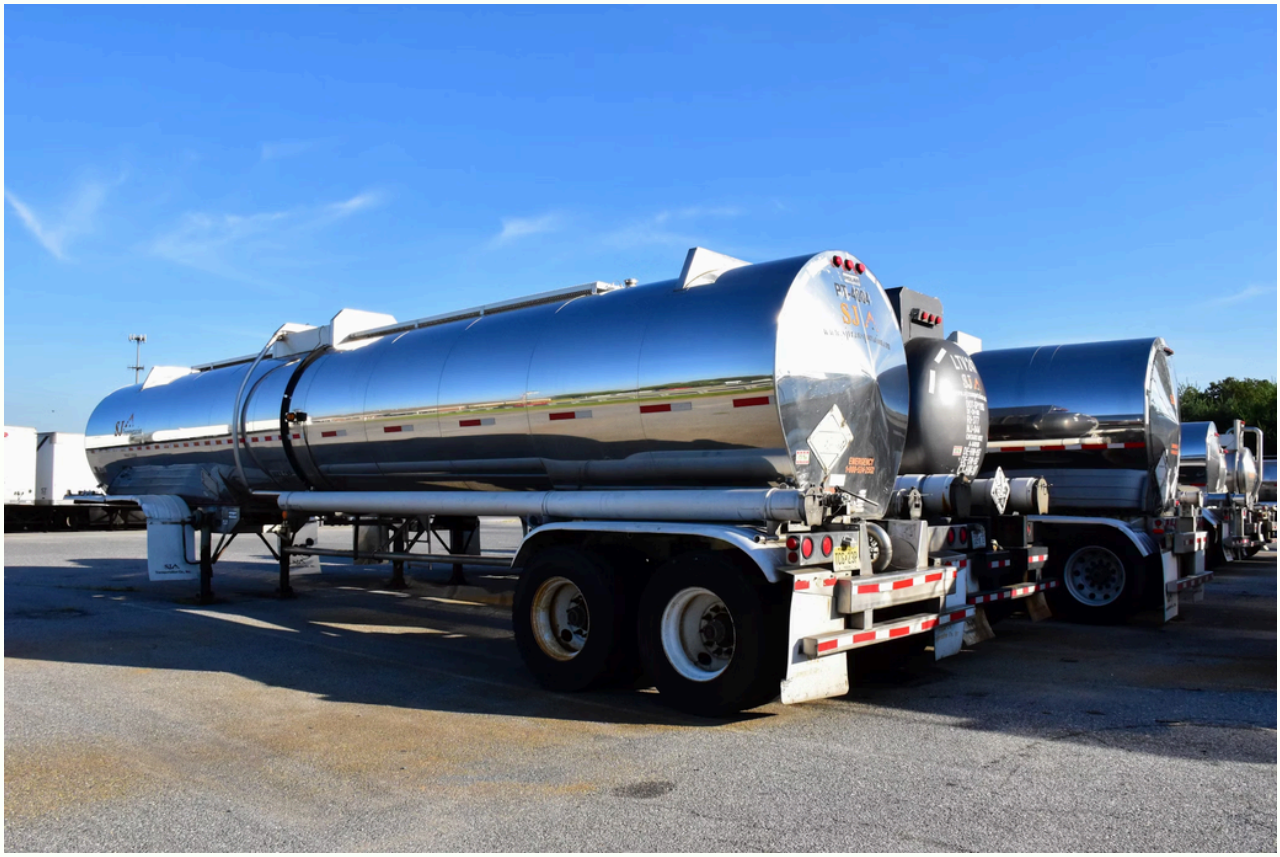
Stakeholders have underscored the significant barrier posed by the high price of SAF in Hong Kong. The current cost implications associated with SAF procurement deter airlines and industry players from transitioning to SAF. In fact, the high price premium associated with SAF adoption, coupled with airlines' low-profit margins, makes it financially unfeasible for businesses to embrace SAF without vital Government support. The financial strain is particularly burdensome for smaller airlines with limited cash flow, indicating the need for financial assistance and supportive policy frameworks to make SAF adoption economically viable for all industry players.

3.3 Significant Gap with International Peers

A significant gap exists between Hong Kong's current state of SAF ecosystem development and that of its global counterparts. Partners have expressed concerns about Hong Kong's delay in adopting SAF and green aviation initiatives compared to international peers, highlighting the challenges that the region faces in maintaining competitiveness in the aviation industry. This lag in aligning with global sustainability standards not only jeopardises its sustainability goals, but also poses risks to Hong Kong's competitiveness, creating a pressing need for strategic action.

On one hand, SAF policy development in the Asia-Pacific region is progressing at a slower pace than in other parts of the world, accentuating the competitive challenges faced by Hong Kong. On the other hand, if Hong Kong accelerates its SAF initiatives too rapidly without aligning demand mechanisms appropriately, there is a substantial risk of HKIA losing its competitive edge relative to other jurisdictions in the Asia-Pacific region. Moreover, divergence from China on standards and certifications could introduce further complexities and hinder Hong Kong's ability to compete effectively in regional and international aviation markets. The growing importance of sustainable aviation practices globally underscores the urgency for Hong Kong to bridge this gap and enhance its competitiveness in the evolving landscape of aviation sustainability.

Creating SAF Demand and Supply in Hong Kong



4.1 The Suitable Approach to Drive Demand

There are two primary approaches on driving SAF development: the supply-driven approach, currently deployed in the US, and the demand-driven approach, as seen in the UK. BEC believes that Hong Kong currently lacks the resources for the supply-driven approach as the jurisdiction does not have sufficient existing feedstock and oil refinery facilities. Instead, the city should focus on the demand-driven approach.

The most significant challenge at present is how to drive SAF demand in Hong Kong. Without clear demand, financial institutions struggle to evaluate the viability of investing in SAF projects, making it difficult to reduce the cost of SAF. The rapidly evolving nature of SAF, the lack of initial investment and the comparatively low profit margins, in comparison to other energy projects initiated by the Government and major industry players, contribute to the reluctance of financial institutions to allocate major resources and funding to SAF-related ventures. As such, Hong Kong must identify effective strategies to drive demand in the current phase to push for SAF development.

Mandates can effectively boost SAF demand in other countries by leveraging established supply chains and robust supportive policies. As BEC investigates the suitability of a SAF mandate for Hong Kong to drive SAF demand, we discover that Hong Kong currently lacks affordable SAF supply. The significant cost premium in SAF supply presents significant challenges. If a mandate is implemented under these conditions, fuel suppliers and airline operators are unlikely to pay the high premium for SAF, rendering the mandate a tax rather than a mechanism to drive demand for sustainable aviation fuel in the region.

The absence of a "polluters pay" scheme, particularly concerning fuel tax, also fails to incentivise key players in Hong Kong's oil and gas industry to develop and import more sustainable fuels to minimise the tax burden. In fact, without established standards from the Hong Kong Government, there are no benchmarks for energy content and environmental performance criteria for fuel suppliers to produce SAF in compliance with regulations. Given these considerations, a mandate for SAF in Hong Kong may face challenges in the current situation. Although the implementation of a SAF mandate has emerged as a crucial step forward, the current lack of supporting policies, guidelines, infrastructure, and systems in the city presents significant challenges and must be addressed accordingly.

A mandate may not be suitable as an immediate solution until the above issues on supply is resolved, as such, BEC would not recommend setting up mandates as a prompt action. Instead, alternative strategies could drive SAF demand and development in the region. As industry demand grows progressively and appropriate policies are established, the Government could consider mandates. In the short-term, allocating government revenue to offset the green premium for airlines using SAF is a viable interim measure to kickstart SAF development. Implementing a levy could be the most suitable option for Hong Kong to spur SAF demand, support financing, and address airlines' concerns about high SAF prices compared to traditional Jet A-1 fuel. The levy can generate a dedicated fund to offset the green premium associated with purchasing SAF, ensuring a sustained demand for SAF in Hong Kong.

4.1.1 Levy Charging and Collection

To understand the most suitable approach considering the circumstances in Hong Kong, it is helpful to reference some components of SAF levies or incentives in other jurisdictions, namely, Singapore Changi Airport and London Heathrow Airport.

Singapore's SAF levy will be implemented in 2026. Under this levy, airlines will charge passengers in a similar manner to existing taxes. The levy amounts are determined based on the projected market pricing of SAF at specific points in time. There will be nine charging tiers which vary depending on flight length and travel class. For instance, the Civil Aviation Authority of Singapore estimates that an economy class ticket could range between SG$3 (HK$18), SG$6 (HK$36) and SG$16 (HK$96) for a direct flight from Singapore to Bangkok, Tokyo and London respectively. Hence, charging rates will increase accordingly for passengers flying in premium classes.

BEC recommends that Hong Kong refer to the practices adopted by Singapore in collecting the levy. Considering the need to drive SAF uptake while acknowledging Hong Kong's role as an international aviation hub, it is advisable for the levy to apply to all departing passengers, while exempting transiting passengers to maintain the competitiveness of Hong Kong as a key transit airport.

In terms of accounting, airlines will be able to claim emissions reduction from SAF usage, contributing to reducing Scope 1 emissions. This will be reflected proportionally to the amount that has been collected.

4.1.2 Levy Allocation

(1) Central SAF Procurement Method

The levy approach employed by Singapore uses a central procurement method, whereby the quantity of SAF procured is determined by the country's near-term SAF targets. Specifically, Singapore aims for a 1% SAF utilisation by 2026, increasing to 3%-5% in 2030.

A notable benefit of this mechanism is that sufficient funds can be collected, creating a stable supply aligned with market prices which is not vulnerable to market fluctuations and does not affect competitiveness. A governing body is still needed for the collection of the levy and the distribution of funds to support SAF uptake.

To facilitate central procurement, the Civil Aviation Authority of Singapore has set up the SAF Buyers Club as the responsible body for handling procurement for airlines. This approach is particularly effective in Singapore due to the presence of a well-developed SAF ecosystem, allowing central procurement to drive local economic development.

However, Singapore's approach presents potential disadvantages when evaluated for suitability in the Hong Kong context. A primary concern is the allocation of the levy for bulk SAF procurement could limit the ability of individual airlines to negotiate the best prices, subsequently undermining their competitiveness and Hong Kong's position as an international aviation hub. Currently, the Hong Kong airport employs an open access approach, which could be compromised if Hong Kong were to adopt a similar bulk procurement mechanism. This shift might limit flexibility for airlines that may have more ambitious decarbonisation targets and may wish to purchase higher quantities of SAF. A bulk purchasing agreement could limit the development of a fully functional SAF market. Moreover, centralised purchasing of SAF may hinder economic activity by reducing efficiency compared to a market-driven approach that allows for free competition and innovation. The centralised procurement approach would not benefit the local economy in the same way that it does in Singapore, given Hong Kong's lack of established SAF ecosystem.

(2) Per Passenger Volume Method

Conversely, BEC recommends utilising the levy to offset the green premium associated with current SAF pricing. The SAF incentive implemented in 2022 at London Heathrow Airport can be referenced. Under this incentive, the SAF quota allocated to each airline varies depending on their Revenue Passenger Kilometres ("RPK"), a passenger volume metric used to gauge passenger demand and optimise flight capacity. This approach provides airlines with ambitious SAF uptake and decarbonisation targets greater flexibility to qualify for more subsidy benefits.

The SAF uptake also influences the distribution of funds, allowing more options for airlines with different requirements — from early leaders in sustainable air travel to smaller operators which may not yet have SAF targets [19]. Hong Kong may refer to the SAF incentive of London Heathrow Airport when developing its own SAF levy allocation mechanism. Looking ahead, additional ways to allocate levies for SAF development could form part of a public-private financing mechanism in the long term to finance the development of SAF infrastructure, such as a blending facility for SAF in Hong Kong.

4.2 The Suitable Approach to Drive Supply

There are three primary approaches to the supply SAF: importing pre-blended SAF, local production of neat SAF, and importing neat SAF for blending within Hong Kong. The more options Hong Kong can accommodate in terms of infrastructure and administrative arrangements, the more choices airlines will have regarding SAF, potentially leading to more affordable prices.

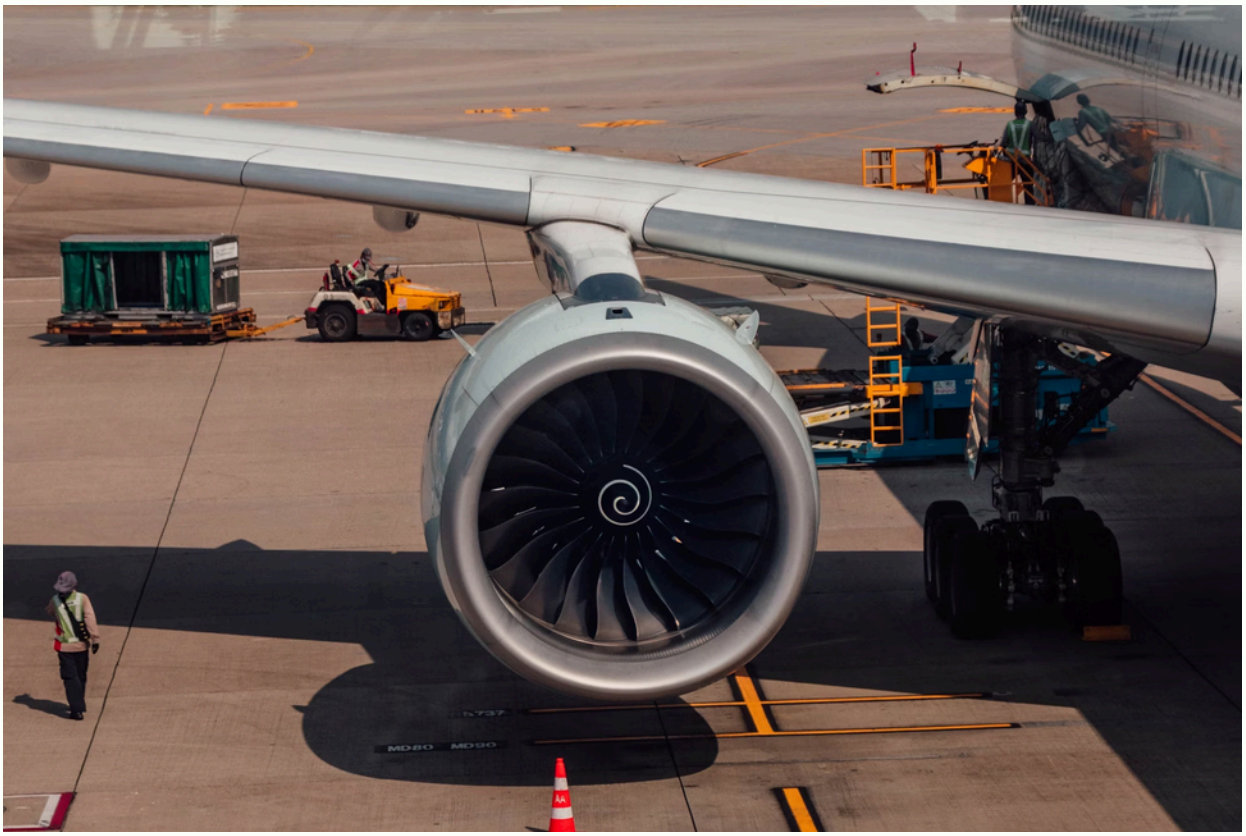
In the context of importing pre-blended SAF, both China and countries in Southeast Asia have established SAF production facilities strategically located near regions rich in feedstock and major international shipping lanes, which facilitates the transportation of pre-blended SAF to Hong Kong.

Regarding local production of neat SAF in Hong Kong, there are two existing biofuel refineries with feedstock collection capabilities that could potentially serve this purpose. One facility is conveniently situated adjacent to HKIA, while the other is located in the Tseung Kwan O Industrial Estate. However, due to the lack of a direct pipeline connecting the latter facility to HKIA, land or sea transportation would be required, potentially increasing operational costs. Moreover, the current local feedstock supply in Hong Kong is insufficient to fully utilise the production capacities of these facilities for SAF production. While they are biofuel producers, they currently do not produce SAF, requiring facility upgrades to meet SAF production standards. Thus, BEC does not recommend local SAF production in Hong Kong at this stage.

In the case of importing neat SAF for blending locally, there is currently no dedicated facility in Hong Kong for this purpose. The construction of blending and storage tanks could be feasible pending a comprehensive feasibility study, including considerations of available land sites. Should the blending option be pursued, acquiring fuel manufacturing licenses and operational permissions from relevant authorities would be essential, along with potential variations to existing Environmental Permits. Notably, considering the current operation, aviation fuel is received and certified in the Permanent Aviation Fuel Facility (“PAFF”), with all the necessary licenses and permits. PAFF houses the sole Jet Fuel Laboratory in Hong Kong for quality checks, along with a pipeline to the jet fuel storage tanks in HKIA. It ensures efficient fuel transportation and maintains high-quality standards. When selecting location of the blending facility, the Government is recommended to consider the streamlined transportation and quality checks for SAF (and jet fuel) before delivery to the airport terminal and avoid duplication of works.

In conclusion, contingent upon a detailed feasibility study, the establishment of blending infrastructure would enhance Hong Kong's SAF capabilities, as supported by the majority of the Coalition Partners. This strategy would enable HKIA to access competitively priced SAF, thus maintaining its competitiveness within the aviation market and leveraging the open access system effectively.

BEC's Recommendations on SAF Uptake



Recognising the challenges identified in Chapter 3, and building on the analysis presented in Chapter 4, BEC provides three core recommendations. In each recommendation, an implementation plan is provided, with timelines categorised into three groups: prompt action, near-term action, and continuous review. It is recommended that the Government prioritise the prompt actions to expedite SAF development. The near-term recommendations may require a longer preparation period and should be implemented once the associated prompt action is in place, ideally within one to two years to maintain global competitiveness. Some of these recommendations will require continued revision to ensure that the implementation is in good progress and to evaluate if an update of targets is necessary.

5.1 Setting up of Government-led Multi-stakeholder Working Group

BEC advocates for the establishment of a multi-stakeholder, cross-sector initiative to drive the development and adoption of SAF. It is essential for various Government bureaus, industry stakeholders, private enterprises, and experts to collaborate effectively. Forming a multi-stakeholder working group is crucial to adopting a holistic approach in spearheading SAF deployment. An exemplary model of such collaboration is the UK Jet Zero Council, where governmental directorial officers collaborate with sector leaders across the supply chain, members of Parliament, and academia to drive effective policies enabling SAF. This working group should focus on the following actions to ensure the progress of SAF uplift is on track.

5.1.1 Prompt Action

01 Establish SAF Uplift Blueprint and Measurable Goals

BEC strongly advocates for the working group to work on the immediate establishment of SAF usage targets and a comprehensive blueprint as a prompt action. This recommendation is driven by the urgent need to set clear and ambitious goals for integrating SAF into the aviation sector of Hong Kong. By defining specific SAF usages target to be achieved by a designated timeline, Hong Kong can align itself with global sustainability initiatives and demonstrate its commitment to reducing carbon emissions in the aviation industry. Although this is not a mandatory requirement, the quantifiable objectives can not only provide a clear direction for stakeholders, but also create market stability by ensuring consistent demand for SAF, thereby encouraging investments in its production and infrastructure. Moreover, a well-defined blueprint outlining the necessary steps and strategies for achieving these targets is essential for guiding the coordinated efforts of various stakeholders. This holistic approach is crucial for promoting the effective adoption of SAF and fostering a sustainable aviation ecosystem in Hong Kong.

In addition, before actual implementation, adequate planning should be prioritised by the multi-stakeholder working group to ensure the targets fulfil its purpose without putting unnecessary pressure on stakeholders. To prepare for these targets, it is essential to engage industry stakeholders in determining feasible decarbonisation targets and timelines, conduct impact assessments to evaluate benefits and challenges, draft legislative frameworks and policy guidelines, and establish a robust monitoring and reporting system to track progress, assess performance, and adapt strategies based on technological advancements and market conditions. Such goal settings should align with international and the forthcoming Chinese standards and certifications, whichever one is more stringent.

02 Conduct Dialogues with Mainland Authorities on SAF Uplift Strategies

BEC recommends that the working group engage in more active dialogues with the mainland authorities regarding SAF uplift strategies as a prompt action. This recommendation is founded on the recognition of the interconnectedness of regional aviation networks and the potential benefits of collaboration in advancing SAF initiatives, under the expectation that the supply of SAF to Hong Kong will be mostly from the mainland. By fostering effective communication with mainland authorities and a clear understanding of the latest policies regarding SAF production, certification, SAF's sustainability standards, mandatory and voluntary markets and export in mainland, Hong Kong can explore opportunities for knowledge sharing, resource alignment, and joint efforts to accelerate SAF development and adoption. Collaborative engagements can facilitate the establishment of common certification standards, streamlined processes, and mutually beneficial arrangements that enhance the supply of SAF to Hong Kong. Additionally, dialogue with mainland authorities can investigate the possibilities of leveraging collective expertise, optimising logistical operations, and tapping into shared resources for the advancement of SAF technologies and infrastructure.

03 Raise Public Awareness on SAF Transition

BEC strongly advocates for prioritising the raising of public awareness about SAF transition as a prompt action. This recommendation is rooted in the belief that immediate and targeted efforts to educate the public about SAF are essential for fostering a supportive environment conducive to sustainable aviation practices. By initiating awareness campaigns early in the transition process, Hong Kong can establish a solid foundation for understanding and acceptance among the general population. Prompt action in raising public awareness serves to proactively address any potential misconceptions or resistance towards SAF adoption, paving the way for smoother integration of SAF technologies in the aviation sector. Moreover, by engaging the public early on, Hong Kong can leverage public interest and enthusiasm to drive momentum towards sustainable aviation solutions, creating a groundswell of support for environmental initiatives within the community.

Timely awareness initiatives also serve to align public expectations with the goals of SAF transition, encouraging active participation and buy-in from individuals, businesses, and other stakeholders.

5.1.2 Continuous review

01 Ensure Continuous Monitoring Mechanism on SAF Development

BEC further recommends that the working group conduct continuous revisions on SAF uplifting progress. Regular reviews enable the tracking of SAF uplift progress, identification of challenges, and adjustment of strategies to effectively meet established goals. Moreover, the collaborative nature of this working group fosters information sharing, exchange of best practices, and consensus-building among diverse stakeholders, ensuring that decisions regarding SAF uptake are informed by a wide range of perspectives. Continual revision of SAF uplift progress not only facilitates timely interventions and course corrections but also demonstrates a commitment to the long-term sustainability of the aviation industry in Hong Kong.

02 Review the Need for Establishing More Stringent Measures such as a Mandate on Departing Flights to Further Incentivise Decarbonisation

After implementing the prompt actions outlined in this whitepaper, the stimulated demand for SAF should be a catalyst for further decarbonisation efforts. To expedite these efforts, the Government should regularly review the progress of SAF uplift and, when deemed appropriate, contemplate more stringent measures, such as mandating the utilisation of various types of SAF derived from diverse production pathways for departing flights. Regular reviews of SAF uptake progress by the working groups are crucial for assessing the necessity of introducing a mandate, supported by a thoughtful feasibility study. This proposed mandate should primarily target fuel suppliers, following models seen in other regions. This mandate, aligning with recommendations for an indicative SAF usage target, should be strategically planned for the long term, contingent upon the establishment of necessary policies and infrastructure. However, the success of such a mandate hinges on pivotal prerequisites: a consistent supply of affordable SAF and a thorough evaluation by the working group to ensure these conditions are met before implementation.

If establishment of a mandate is considered by the working group, BEC recommends implementing a tradable certificate scheme to facilitate compliance for suppliers unable to meet the mandate's requirements. Introducing a local tradeable certificate scheme in Hong Kong would strategically incentivise fuel suppliers to actively participate in and financially support decarbonisation efforts within the SAF sector. This transparent and accessible marketplace for tradeable certificates would allow suppliers to purchase SAF certificates from other providers to meet future mandate obligations.

The feasibility study, establishment, and regulation of this scheme are suggested to be overseen by the Hong Kong Government to ensure its integrity and effectiveness, drawing inspiration from successful models like the UK's tradable certificate scheme managed by the UK Department for Transport. These certificates should be restricted to trading within Hong Kong to ensure actual SAF uplift within the region. By aligning with international standards and IATA recommendations for scope 1 and scope 2 emissions, the implementation of such a scheme can guarantee credibility and efficiency, so to promote sustainability within Hong Kong's aviation industry.

This mandate recommendation should reference two significant benchmarks: the global ICAO CORSIA sustainability scheme and the forthcoming Chinese Government aviation decarbonisation initiative. SAF for use in Hong Kong must adhere to these stringent requirements to meet global expectations, ensuring Hong Kong's competitiveness as an international aviation hub both globally and within the Chinese aviation market.

5.2 Provision of Government Subsidies and Implementation of Levy for Enhancing SAF Demands

To address the pain points of lacking economic signals and the high price of SAF, BEC suggests the phased implementation of the following policy recommendations. This approach is designed to progressively deliver the necessary economic signals and provide crucial industry assistance to kickstart SAF development in Hong Kong.

5.2.1 Prompt Action

01 Provide Provisional Government Subsidies

In order to address the notable price disparity between SAF and traditional jet fuel, which poses a significant challenge, BEC emphasises the necessity of financial backing from the Government to propel SAF development and uptake. These subsidies are vital in mitigating financial hurdles, particularly in the early stages when substantial investments are required without guaranteed returns. Initial financial support should be targeted towards offsetting the green premium, thus narrowing the price gap that airlines face between conventional jet fuel and SAF.

02 Provide Research Fund on SAF Innovation and Application

One possible avenue for the Government to consider is reallocating a portion of existing research grants towards **funding research specifically aimed at SAF** and its local applications. This strategy mirrors the funding approaches adopted by numerous countries that actively support research and development endeavours centred on SAF.

03 Conduct Feasibility Study on SAF-related Levy Scheme

Following the formulation of the vision and plan for Hong Kong by the multi-stakeholder working group, the city must focus on securing sustained financial resources. Central to this endeavour is the proposal for a levy charge.

The Government is urged to promptly commence strategic planning for the introduction of a levy for SAF initiatives. The levy would serve as a vital financial tool to support SAF development. Essential steps in planning for the levy's implementation include conducting a thorough feasibility study to gauge its impact on various stakeholders and on HKIA’s competitiveness as an international aviation hub, devising a detailed roadmap for the implementation process, collaborating with experts to design a fair and transparent levy structure, and setting up a monitoring framework to evaluate its effectiveness in advancing SAF adoption by a structured and fair allocation mechanism.

To legitimise levy collection, the Government must explicitly earmark the proceeds for SAF procurement and uplift at HKIA. BEC proposes using the levy to offset the green premium associated with current SAF pricing, thereby bridging the price gap between conventional fuel and SAF. The levy system should be designed so that levy is distributed to airlines based on their SAF procurement levels, with higher SAF uptake leading to increased levy benefits. This incentivises airlines to show greater commitment to SAF acquisition. However, this could also create competitive advantages for airlines that already have an established SAF supply chain, potentially making it difficult for smaller airlines which procure a lower quantity of fuel in general. To address this, there should be a consideration of how various procurement arrangements can facilitate a more level playing field among airlines of different sizes and SAF infrastructure in place.

By leveraging the open access system of HKIA, the strategy allows airlines to access SAF freely in the market, facilitating favourable deals with suppliers.

5.2.2 Near-term Action

01 Develop Levy Allocation Mechanism

The establishment of an equitable allocation mechanism by the Hong Kong Government holds significant importance in the promotion of SAF uptake among airlines while maintaining the competitive edge of HKIA. This mechanism, based on airlines' SAF procurement levels, serves as a powerful incentive for airlines to embrace environmentally friendly practices. By tying levy benefits to higher SAF usage, the system encourages airlines to prioritise sustainability in their operations.

However, there is a potential drawback which requires careful planning. A poorly structured mechanism could inadvertently favour airlines already integrated into SAF supply chains, potentially disadvantaging smaller carriers with limited fuel volumes. This disparity could hinder their ability to compete on a level playing field. Therefore, a crucial aspect to address is ensuring that the allocation system is fair and does not inadvertently create barriers for airlines without established SAF procurement networks. Striking a balance between incentivising SAF uptake and fostering fair competition is paramount to achieving the overarching goal of sustainable aviation practices in Hong Kong.

Thorough research and thoughtful design of the levy system are essential for the Government to navigate these complexities and ensure that the mechanism benefits the industry as a whole while promoting sustainability and competitiveness in the aviation sector.

02 Implement Levy on Passengers Departing from Hong Kong

Based on the outcomes of the feasibility study on SAF-related levy scheme as mentioned in the above session, BEC recommends the implementation of the levy scheme to facilitate SAF purchases as a near-term action.

To foster SAF adoption while maintaining the competitiveness of Hong Kong as a transit hub, the levy should apply to departing passengers, exempting transit passengers. Considering factors such as travel distance and class, akin to the Singaporean model, can be beneficial. However, to address public concerns regarding increased flight costs, proactive city-wide promotional strategies should be implemented, as detailed in the above section.

5.3 Development of Local SAF Blending Capacity

Given the high green premium of pre-blended SAF, the implementation of SAF in Hong Kong is unlikely to succeed. Having the necessary supporting infrastructure would help enable a more cost-effective option, lowering the green premium. Hence, the inclusion of a blending facility is instrumental. Airlines at HKIA can purchase SAF from any fuel suppliers in accordance with the Open Access System. Given these factors, BEC has therefore put forth the following recommendations.

5.3.1 Prompt Action

01 Facilitate Necessary Arrangement for Neat SAF Import

Facilitating the necessary administrative arrangements can streamline the import process of neat SAF into Hong Kong. Operational arrangements must be established to ensure the smooth importation of SAF. Clear administrative protocols can enhance the efficiency and compliance of SAF import processes, aligning with global certification standards and the forthcoming Chinese regulatory requirements. Following ASTM and the forthcoming Chinese standards for the properties of SAF intended for use in Hong Kong is recommended due to their widespread recognition internationally as well as regionally. Moreover, addressing logistical concerns in transporting SAF to HKIA is crucial.

02 Conduct Feasibility Study on the Construction on SAF Blending tank in Hong Kong

It is imperative that the Government prioritises the establishment of a SAF blending tank facility to facilitate SAF blending. This initiative calls for a comprehensive feasibility study on selecting optimal locations for the blending tank, engaging with industry stakeholders and logistics experts to design the infrastructure and operational processes, formulating a procurement strategy for construction, and ensuring regulatory compliance with stringent safety and environmental standards.

While the facilities servicing HKIA are able to receive, store and adopt pre-blended SAF, they are unable to produce and blend SAF. Given the lack of refineries in Hong Kong, pre-blended SAF has traditionally been shipped to Hong Kong from other locations in the world. Establishing a SAF blending tank would be most feasible in Hong Kong, whereas a new production plant is not an option. Neat SAF storage tanks would also be required in conjunction with the blending tank, as neat SAF and Jet A-1 are of different chemical properties and must be stored separately. The blending tank would enhance flexibility and economic viability, upholding its position as one of the leading international aviation hubs.

5.3.2 Near-term Action

01 Facilitate Establishment of Neat SAF Storage and SAF Blending Facility

With the outcomes of the feasibility study conducted, BEC recommends the Government to facilitate establishment of the construction of dedicated SAF blending and storage tanks in Hong Kong, in the location deemed the most suitable for Hong Kong identified in the feasibility study. This infrastructure enhancement would make local blending possible and facilitate efficient neat SAF storage, ensuring a seamless supply chain for SAF within HKIA. Such infrastructure is essential for positioning Hong Kong as a competitive hub for sustainable aviation practices.

5.4 Recommendation Summary

The following table summarises BEC's recommendations for upscaling SAF in Hong Kong, corresponding to the timeline for their implementation.

Table 5 Recommendation Summary

	Setting up of Government-led Multi-stakeholder Working Group	**Provision of Government Subsidies and Levy for Enhancing SAF Demand**	**Development of Local SAF Blending Capacity**
Prompt Action	• Establish SAF Uplift Blueprint and Measurable Goals • Conduct Dialogues with Mainland Authorities on SAF Uplift Strategies • Raise Public Awareness on SAF Transition	• Provide Provisional Government Subsidies • Provide Research Fund on SAF Innovation and Application • Conduct Feasibility Study on SAF-related Levy Scheme	• Facilitate Necessary Arrangement for Neat SAF Import • Conduct Feasibility Study on the Construction of SAF Blending Tank in Hong Kong
Near-term Action (1-2 years)		• Develop Levy Allocation Mechanism • Implement Levy on Passengers Departing from Hong Kong	• Facilitate Establishment of Neat SAF Storage and SAF Blending Facility
Continuous Review	• Ensure Continuous Monitoring Mechanism on SAF Development • Review the Need for Establishing More Stringent Measures such as a Mandate on Departing Flights to Further Incentivise Decarbonisation		

Way Forward

Moving forward, BEC is poised to continue to work with Coalition Partners in HKSAFC to actively engage with stakeholders, especially the Government, to advocate for the implementation of the recommended actions. Continuous dialogue and collaboration with key decision-makers will be paramount in driving policy change and fostering a supportive environment for SAF initiatives. By maintaining open channels of communication and advocating for sustainable aviation practices at all levels, BEC aims to influence policy development and promote the adoption of SAF within the aviation sector.

To amplify the impact of our advocacy efforts, BEC plans to organise dissemination events and public promotion activities. These initiatives will serve to raise awareness among the general public about the benefits of SAF and the importance of sustainable aviation practices. By educating and engaging the community through targeted outreach campaigns, BEC aims to garner public support for SAF initiatives and encourage individuals to advocate for greener aviation solutions. Through these proactive communication strategies, BEC seeks to build a broad base of support and mobilise stakeholders towards a common goal of promoting sustainable aviation practices in Hong Kong.

In addition to advocacy efforts and public engagement activities, BEC is committed to establishing sub-working groups in HKSAFC focused on specific topics of interest identified. These sub-working groups will bring together expertise not only from the Coalition Partners but also from supporting organisations, industry stakeholders, and potential representatives from the Government. By fostering collaboration and knowledge sharing among a diverse range of stakeholders, including experts from various sectors, BEC aims to leverage collective insights and drive innovative solutions for advancing the adoption of SAF in Hong Kong.

To conclude, by continuing to engage with stakeholders and advocating for policy actions, coupled with strategic dissemination events and public promotion activities, and through the inclusive participation of key stakeholders, BEC will play a crucial role in shaping strategies, fostering partnerships, and implementing initiatives that contribute to the overarching goal of developing Hong Kong's position as a regional and global hub for SAF.

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About BEC

Business Environment Council Limited (“BEC”) is an independent, charitable membership organisation, established by the business sector in Hong Kong. Since its establishment in 1992, BEC has been at the forefront of promoting environmental excellence by advocating the uptake of clean technologies and practices which reduce waste, conserve resources, prevent pollution and improve corporate environmental and social responsibility. BEC offers sustainable solutions and professional services covering advisory, research, assessment, training and award programs for government, business and the community, thus enabling environmental protection and contributing to the transition to a low-carbon economy.

About HKSAFC

The Hong Kong Sustainable Aviation Fuel Coalition ("HKSAFC") is a programme launched by BEC in January 2024 that engages stakeholders in developing Hong Kong’s position as a regional and global hub for SAF; delivers forefront research on SAF feasibility and strategies in Hong Kong; scales SAF supply chain and adoption in Hong Kong with competitive costs; and promotes the introduction of SAF industry-related support policies to the HKSAR Government. The HKSAFC works collectively with all relevant stakeholders across the value chain, including practitioners from fuel suppliers, airlines and decarbonisation professionals.

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