









**OPPORTUNITY** 



IMPACT (





SAF – PENINSULA is an initiative led by Hallow Energy with the strategic support from two great

Engineering Universities in Mexico. It aims to be the first company to produce Sustainable

Aviation Fuel (SAF) in Southeastern Mexico, contributing to the decarbonization of the aviation industry and addressing other environmental challenges in the process.





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What are we talking about?

SAF: Sustainable Aviation Fuel

•A biofuel or e-fuel that reduces carbon emissions in aviation

•Produced from waste, used oils, biomass, or captured CO<sub>2</sub>

•Blended with jet fuel without modifying engines or airport infrastructure



Sustainable fuel to reduce the carbon footprint.

A proven solution for one of the hardest industries to decarbonize.

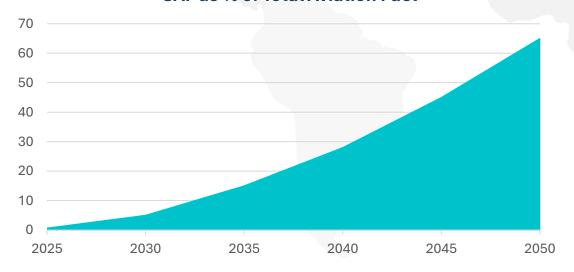


## **SAF Growing Demand**

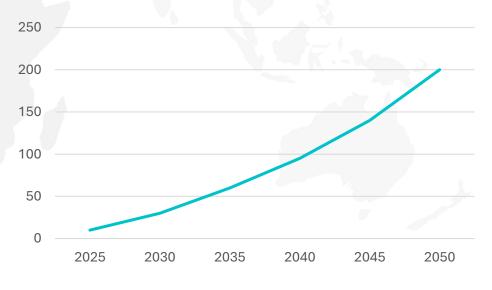
# GLO BAL

- •Aviation accounts for 2.5% to 4% of global CO<sub>2</sub> emissions
- •Increasing international pressure to reduce emissions
- •Regulations require SAF usage: 2% by 2025, 6% by 2030, >50% by 2050

#### SAF as % of Total Aviation Fuel



#### **SAF Global Demand (Million Tons)**



### **GDP and Petroleum Consumption Relationship**

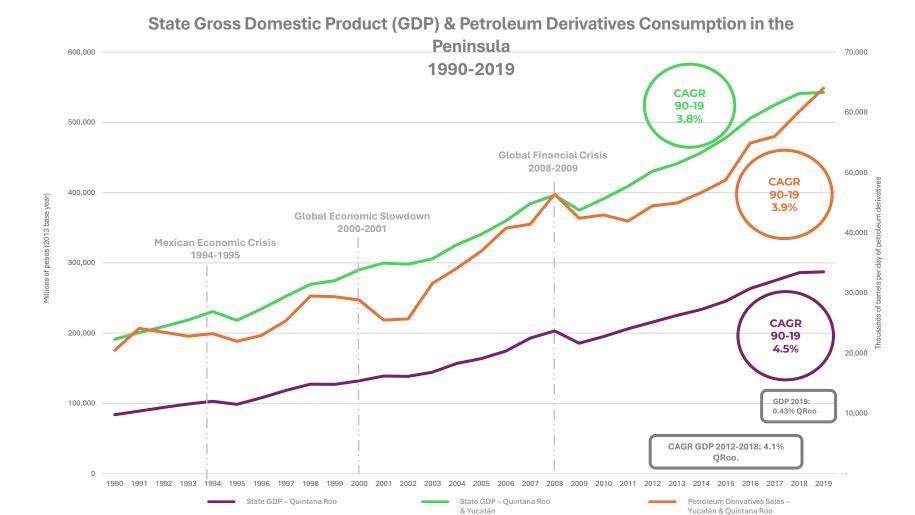
## **Economy in the Peninsula**

The demand for jet fuel, diesel, and gasoline is linked to the economic performance of the Peninsula.

The compound annual growth rate (CAGR) of the state GDP of Quintana Roo and Yucatán was 3.8% (1990–2019).

The CAGR of petroleum product sales (jet fuel, diesel, and gasoline) was 3.9% (1990–2019).

Much of this demand growth comes from international and domestic tourism arriving in the Peninsula.



### **Economy in the Peninsula**

#### **Growth Rates in Jet Fuel Consumption**

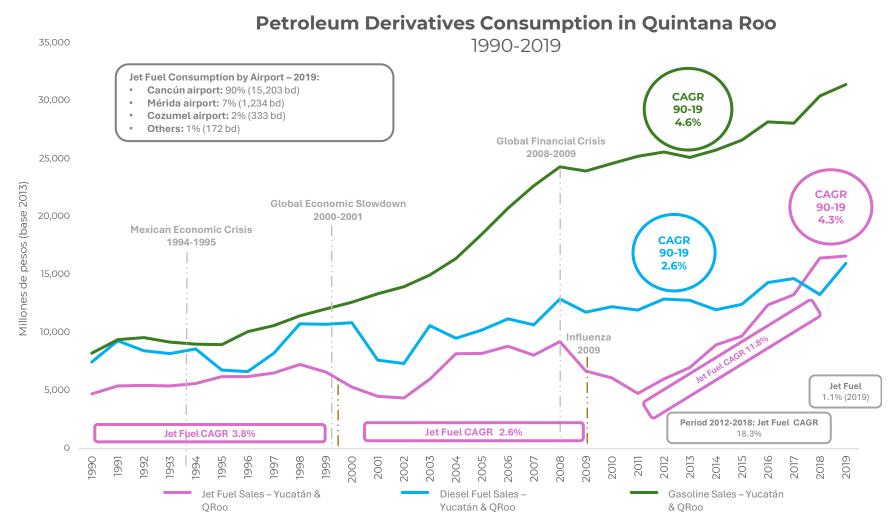
Unlike diesel and gasoline consumption, jet fuel consumption in the Peninsula is tied to the global economy.

Compared to diesel and gasoline growth rates, jet fuel rates in the Peninsula are higher.

 Ranging from 1.1% (lowest) to 18.3% (highest)

#### Trend from 2018 to 2023

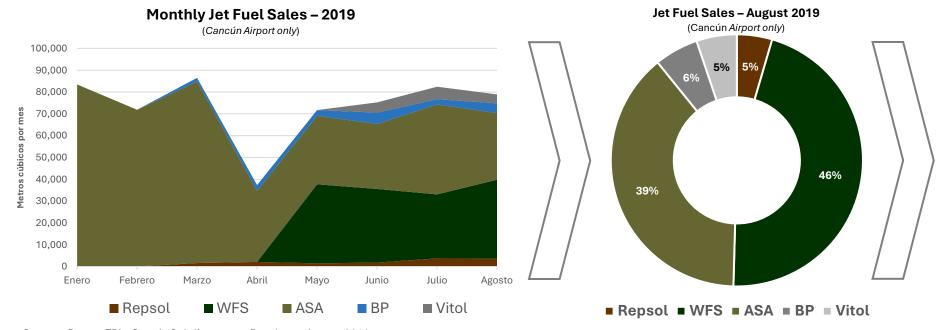
- From 2018 to the end of 2023, passenger traffic at Cancún Airport grew by 28.5%
- From 2018 to the end of 2023, passenger traffic at Mérida Airport grew by 31.7%
- Jet fuel consumption growth rates



#### Jet Fuel Market at Cancún Airport

## **Hydrocarbons in the Peninsula**

- Cancún Airport is the second most important in Mexico, with an average annual jet fuel consumption of 15.2 mbd, and operations grew 28.5% from 2018 to the end of 2023.
  - O In 2024, annual jet fuel consumption in Cancún reached 6.7 million barrels, one million more than in 2019.
- Pemex TRI is the only jet fuel marketer in the Peninsula and supplies the market with imported product.
  - O Imports mainly come from the Gulf of Mexico region in the United States.
  - O Pemex TRI does not offer into-plane service, so final sales are handled by other marketers such as WFS, ASA, Repsol, and BP.\*
- ASA Cancún is the only jet fuel storage provider at the airport and holds a 39% market share (as of August 2019) in final sales.
  - O Demand aggregator WFS holds a 46% market share in final jet fuel sales.



**Source**: Pemex TRI – Supply Subdirectorate Database, August 2019.

#### Jet Fuel Sales – August 2025 (Cancún Airport only)

- As of today, data on jet fuel consumption is no longer publicly available.
- Through its subsidiary PMI and Pemex TRI, Pemex imports jet fuel.
- The Mexican Army is responsible for distributing the jet fuel consumed in the Peninsula.
- It is likely that the companies that provided last-mile jet fuel delivery in 2019 have exited the market.

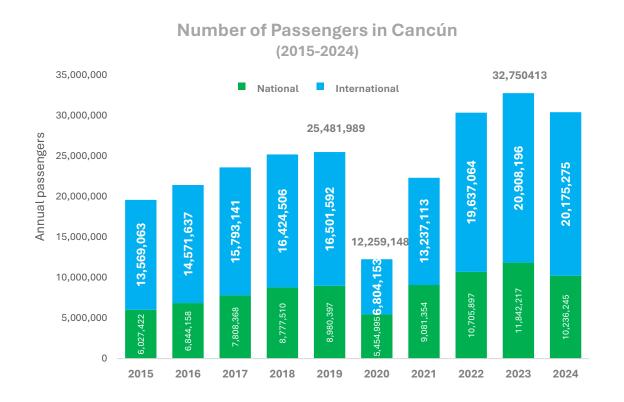
<sup>\*</sup>Note: Vitol appears to have exited the jet fuel business in the Peninsula.

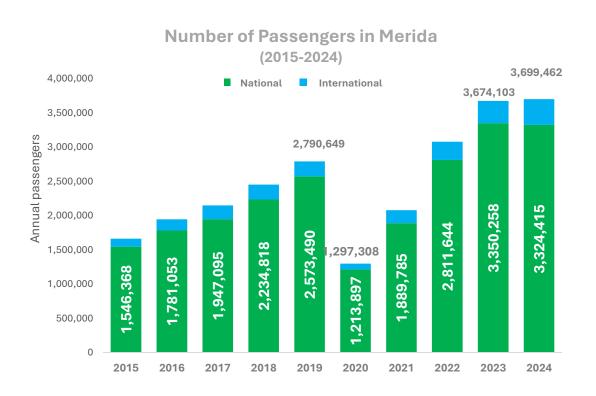


#### **Operations at Cancún and Mérida Airports**

### **Operations in the Peninsula**

- Annual passenger volume at Cancún and Mérida airports continues to grow.
  - In 2023, Cancún Airport reached 32.75 million passengers, 7 million more than in 2019.
    - o In 2023, nearly 21 million passengers were international, and only 11.8 million were national.
  - Mérida Airport reached 3.7 million users in 2024, nearly 1 million more than in 2019.
    - Most passengers were national, but nearly half a million were international in 2024.





**Great Potential in Mexico** 



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# MÉX ICO

Liters of jet fuel consumed in Mexico over the last decade

45,000 MM

Expected CAGR of the SAF market (2025–2034)

46.2%

Liters of SAF consumption expected in 2030

340 MM

Year from which airlines flying from Europe must use SAF (ReFuelEU)

2025



CAN CÚN

MÉRIDA

**2**°

Mexico's busiest airport

**2**°

Peninsula's busiest airport

32.75 MM

Annual passengers in 2023

3.67 MM

Annual passengers in 2023



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#### **Strategic Location**

- Second most important airport in Mexico
- Access to seaports for importing inputs and exporting products
- Future integration with the Maya Train for fuel transportation

H.E.F.A. Hydroprocessed

Esters

**F**atty

Acids



#### **Technology**

- Most mature and certified SAF technology (80% of global production)
- Certified by ASTM D7566 for commercial aviation use
- Commercial-scale ready and compatible with multiple feedstocks



#### **Raw Materials**

- Sargassum: abundant; solves environmental and tourism issues
- Used Cooking Oils: from hotels and restaurants
- Non-edible Crops (Jatropha and Camelina): resilient to the Peninsula's climate and do not compete with food production

In addition to its strategic location and one of Mexico's most important airports, the Peninsula has abundant raw materials for SAF production.