



RESULT OF THE ANALYSIS OF QUOTATIONS:

**Regional roadmap to support
decarbonization and the energy transition
of the aviation sector in Latin America
and the Caribbean.**

December 2024



Context

The transition to decarbonization in Latin America and the Caribbean is essential for aviation, especially in charting a viable path for SAF. It is crucial, therefore, to develop a multidimensional approach that considers a wide range of factors, from the diversification of feedstock sources to the assessment of political, socioeconomic and environmental impacts.

Collaboration between governments, industry and academia will be critical to achieving this goal.



Objective

Decide on the academic institution or consulting firm with experience in sustainability projects to develop the roadmap project: pathway for the decarbonization of aviation in Latin America and the Caribbean based on a rigorous analysis of the proposals received and their delivery schedules.

Bidding / selection of academic institution or consultant



Academic Institution



Consulting



Consulting



Consulting

Cost and Payment

ICF SH&E Limited 1

- **128.100 USD**
- Setting the baseline.
- Mitigation pathway enabling factors.
- Decarbonization pathway scenarios.
- Efficiencies and recommendations.
- **Payment:** 25% / 75%.

MIT : Center for Sustainability Science and Strategy 2

- **150.000 USD**
 - Sustainable Aviation.
 - Regional cooperation.
 - **Payment:** One-time.
- Note:** transform the proposal into a **sponsored research agreement**, which implies a longer negotiation process, estimated at about one year.

ERM 3

- **213.000 USD**
- A review of the LAC aviation market.
- An assessment of decarbonization options.
- Defining a clear decarbonization roadmap.
- **Payment:** 30% / 40% / 30%

PA Consulting 4

- **260.000 USD**
- Sustainable baseline.
- Alternative pathways.
- Sustainability roadmap.
- **Payment:** 25% / 50% / 25%.

Considering the cost-benefit ratio, ICF's quotation is the most favorable option, offering a savings of USD 21,900 compared to MIT's proposal.

Project Timeline

PA Consulting ¹	ERM ²	ICF SH&E Limited ³	MIT : Center for Sustainability Science and Strategy ⁴
<ul style="list-style-type: none">• Late June 2025	<ul style="list-style-type: none">• Late July 2025	<ul style="list-style-type: none">• August 2025	<ul style="list-style-type: none">• February 2026• 12 months from the start (estimated start date: March 2025).

PA is proposing a final report by June, which would allow information to be available before the ICAO assembly in September. ERM proposes delivery by July, and ICF, proposes delivery by August, all of which could present significant progress at the fuel and sustainability conference in March.

MIT proposal, 12 months from the start (start: March 2025): a report prepared for publication at the ALTA website Subject to the agreement between MIT and ALTA, stakeholder and media engagement about findings.

Project team MIT: Center for Sustainability Science and Strategy

Extensive expertise in analyzing technology deployment, strategies and policies for decarbonization in many regions of the world and in different sectors of the economy.

Monthly review meetings between MIT and ALTA will be organized.

Present the partial results: At the UN COP-30 in Belem, Brazil

Sergey Paltsev

- Deputy Director of the MIT Center for Sustainability Science and Strategy and Senior Research Scientist at MIT Energy Initiative

Dr. Angelo Gurgel

- Principal Research Scientist at the MIT Center for Sustainability Science and Strategy

Dr. Jennifer Morris

- Principal Research Scientist at the MIT Center for Sustainability Science and Strategy.

Dr. Henry Chen

- Research Scientist at the MIT Center for Sustainability Science and Strategy.

Project team ERM

Proposed project team comprises a team of experts in aviation decarbonization with experience of supporting strategy and project development.

- 6 Workshops.
- At KO, ALTA will communicate whether additional weekly calls with ERM would be useful beyond the scheduled workshops.



Project team: PA Consulting

Led by Carlos Ozores, a partner with extensive experience advising airlines throughout Latin America. Mikel Santos, an expert in sustainability and decarbonization, will lead the project, supported by a team specialized in aviation sustainability, carbon markets and policy.

Present the results: 2 in-person workshops

1. Late February
2. Late March (to coincide with the ALTA Fuel & Sustainability Conference) + interim report

- Late June: Final report and in-person presentation to the ALTA executive committee.

Carlos Ozores

- Partner in charge.

Kata Cserep

- Senior Sustainability Advisor.

Mikel Santos

- Project Manager and Descarbonization Lead.

Michael Rossell

- Aviations Regulations & Policy Lead.

Amelia Garbutt

- Sustainability Consultant.

Rohan Patel

- Sustainability Consultant.

Project team: ICF SH&E Limited

The proposed team has deep expertise in environmental forecasting, carbon markets and aviation decarbonization, having successfully executed projects in these areas.

Bi-weekly update calls (note: all on-site visits will be complemented with bi-weekly calls to ensure continuous and consistent communication).

- Fuel & Sustainability Conference (optional).

Alastair Blanshard

- Project Director (Spain)

Africa Abajas

- Carbon Markets (Spain)

Inmaculada Gomez

- SAF Specialist (Spain).

Denis Bilyarski

- Descarbonization Specialist (Spain)

Key features to detail

Feature	MIT Quotation	PA Consulting Quotation	ICF SH&E Limited Quotation	ERM Quotation
Regional advantage and limitation analysis	Assess the economic impact of SAF mandates (EU, U.S. and regional) to ensure equitable decarbonization.	Regional baseline, drawing on the current regulatory framework, fleet mix and fuel burn, pax numbers, and policies and practices in the Latin American and Caribbean.	Assessment of the regional targets, state action plans, and existing literature.	Assessment of sustainability initiatives in the region and benchmarks from other regions, identifying key challenges & opportunities.
Consideration of socio-economic factors	Stakeholder engagement (policy makers, government, industry, researchers), political influence, industry impact.	The sustainable baseline will consider economic, fiscal, environmental and social priorities.	<ul style="list-style-type: none"> - Demand forecasts based on economic (GDP) and price (cost of flying) assumptions. - SAF Supply side (feedstocks and infrastructure, global policy analysis and applicability) - Carbon offset supply side. 	<ul style="list-style-type: none"> - Demand trends, and policies for each of the countries in scope. - A review of domestic feedstock availability by country. - Describe current status of SAF demand and supply.
Consideration of regional integration of carbon markets and SAF	MIT EPPA model to explore how regional cooperation on carbon markets and SAF impacts aviation demand in Latin America/Caribbean.	Alternative pathways: to examine options for regional cooperation and integration of SAF and carbon markets.	<ul style="list-style-type: none"> - Global policy analysis and applicability. - Options for regional cooperation and market integration to ensure efficiency. 	<ul style="list-style-type: none"> - An overview of the voluntary carbon market and current trends. - Review of the international regulatory framework. - Evaluation of most suitable SAF pathways.

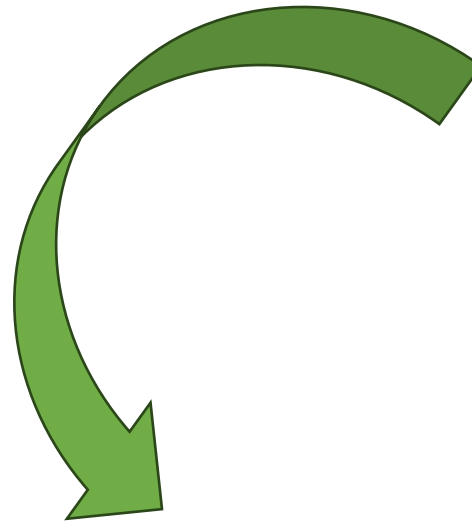
Academic Institution

- Focus on research.
- Access to experts.
- Multidisciplinary teams.
- Objectivity and search for knowledge.
- Depth of analysis.
- Innovative approach.

vs

Consulting

- Dedicated experts.
- Experience and practical approach.
- Adaptability and flexibility.
- Results oriented.
- Agility.
- Industry relationships.



The choice of a consulting evidences a clear understanding of the scope of the project with its respective adaptability. Their experience in the aeronautical sector, combined with planning, ensures that a robust and effective regional roadmap can be developed.

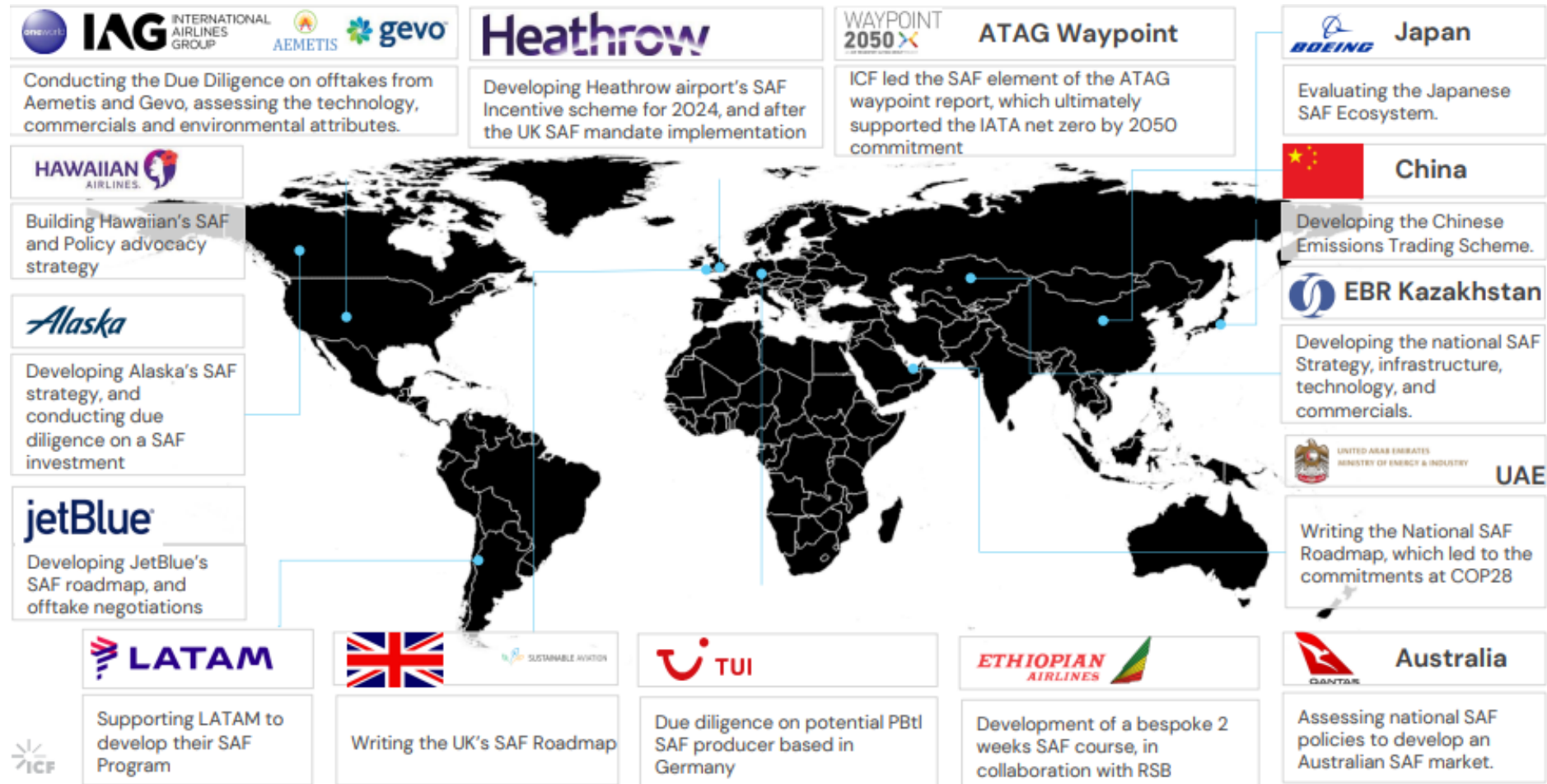
Result of proposal analysis



It has been noted that the ICF proposal is notable for its strong regional focus and competitive cost. Unlike MIT, whose proposal lacks depth in these aspects, both PA and ICF incorporate these factors into their analyses, with PA specifically emphasizing the study of carbon market options.

However, it is the ICF proposal that, overall, presents an optimal balance between cost, team experience (comprised of 4 experts) and alignment with the evaluation criteria.

With a strong international track record, ICF has worked with airports, airlines and governments to drive the development of sustainable aviation fuel projects.



Client	Link
Developing the Heathrow SAF Incentive	[1]
Writing the UK SAF Roadmap	[2]
Evaluating the Japan SAF Ecosystem	Published Jan '24
Supporting the UAE SAF Roadmap	[3]
SAF Investment opportunity screening for TUI	Confidential
EBRD SAF Analysis of Kazakhstan	Confidential
Developing SAF policy in Australia	Confidential
Due Diligence on PtL SAF Producer	Confidential
ATAG Waypoint SAF Report 'Fuelling Net Zero'	[4]
Due Diligence on Gevo and Aemetis	Confidential
Developing SAF support mechanisms in Hawaii	Confidential
Developing Alaska Airline's SAF Strategy	Confidential
Developing JetBlue's SAF Strategy	[5]
Conducting IAG's industry benchmarking	Confidential
Developing SAF policies in South America	ALTA
Due diligence on US PtL producer	Confidential
Developing the SAF Roadmap for Air Transat	Confidential
Developing the SAF Strategy for SOCAR	Confidential

The project team has extensive experience in developing and implementing SAF strategies for airlines, airports and governments.





¡Gracias por la confianza y colaboración!
Esto es solo posible con su apoyo y trabajo en conjunto

