



SAF in Emerging and Developing Economies



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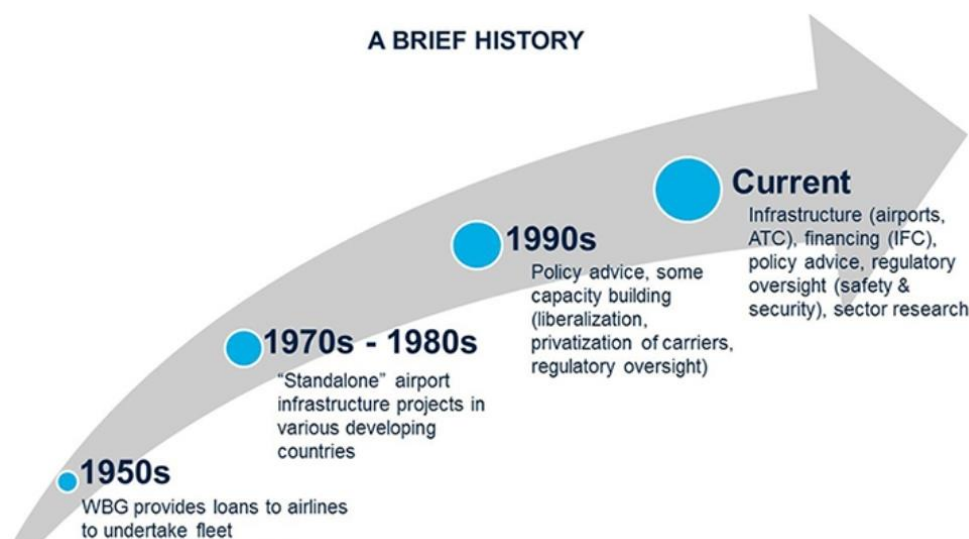


Outline

- 1. Air Transport at the WBG**
- 2. Highlights from our Recent SAF Report**
- 3. Ongoing SAF Related Activities at the WB**

WBG's Long History of Supporting the Aviation Sector

In FY23 its Aviation Portfolio Amounted to \$1.5 Billion



The World Bank has financed aviation-related projects for over 70 years.

The WBG remains actively engaged in every region on projects related to air transport policy and regulation, safety, infrastructure rehabilitation, institutional strengthening, and capacity building.

IBRD/IDA: Regional and domestic investments in safe, secure and resilient airfield infrastructure and facilities, with a range of TAs on connectivity

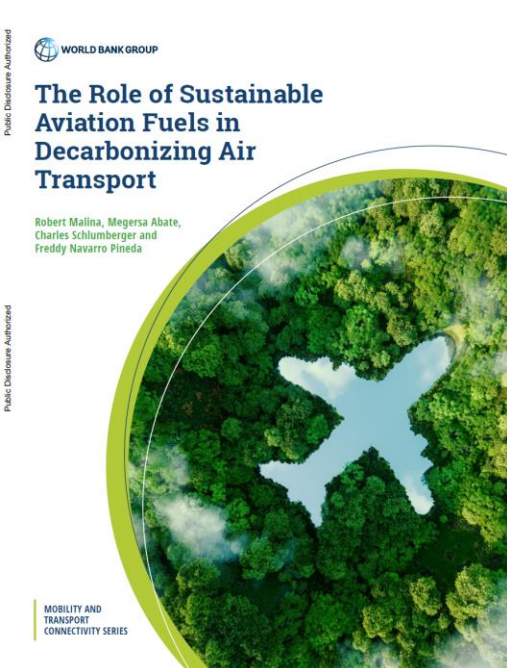
28 lending & non-lending projects or project components

- Pacific Aviation Investment Program
- Caribbean Regional Air Transport Connectivity
- Tanzania: Secondary Airports (3)
- DRC: Goma and secondary airports
- Mauritius: Rodrigues Airport Project

IFC: 11 active operations in its investment portfolio and 6 Advisory Mandates

MIGA: Two Guarantees for airport projects in Jordan & Madagascar

World Bank Report: The Role of Sustainable Aviation Fuels

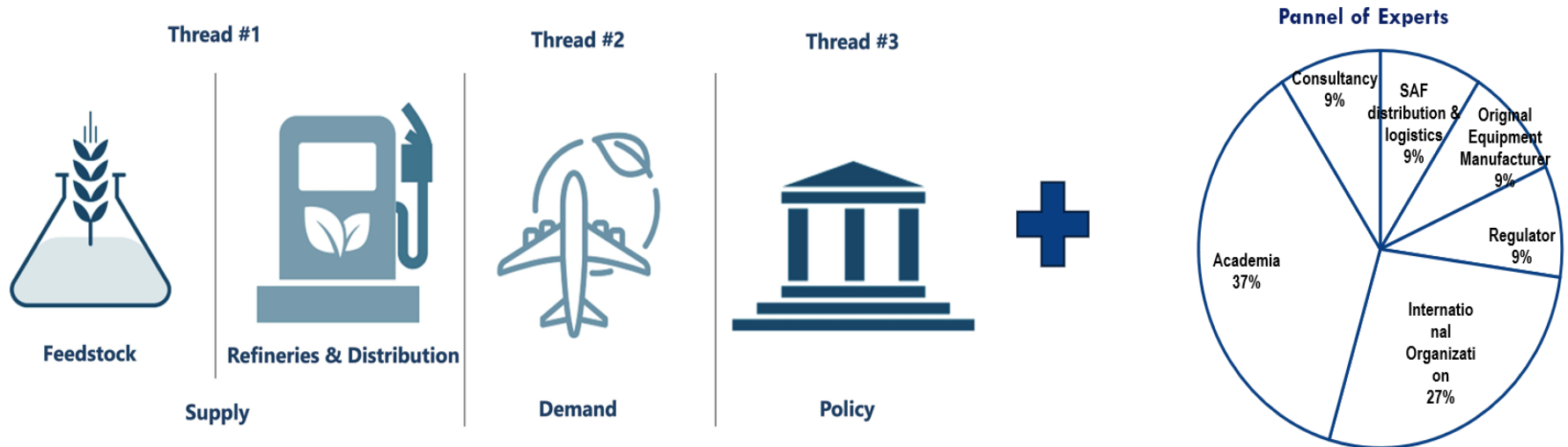


Key Messages

1. **SAF production can reduce up to 58% of aviation GHG emissions compared to business as usual in 2050** – this will require significant policy support, even more so in developing countries.
2. **Current SAF production plans are dominated by OECD locations**, developing countries are missing out on significant economic, environmental and social benefits of SAF production.
3. **Required investment for the scale-up of SAF is high, but comparable** to current and historical investments in other energy sectors.
4. **Developing countries risk “being left behind”, when it comes to access to SAF.** There is no systematic effort yet to explore and evaluate SAF potential in emerging countries, despite favorable feedstock endowment both in sustainable biomass and renewable resources and economic development co-benefits such as jobs creation and GDP growth.

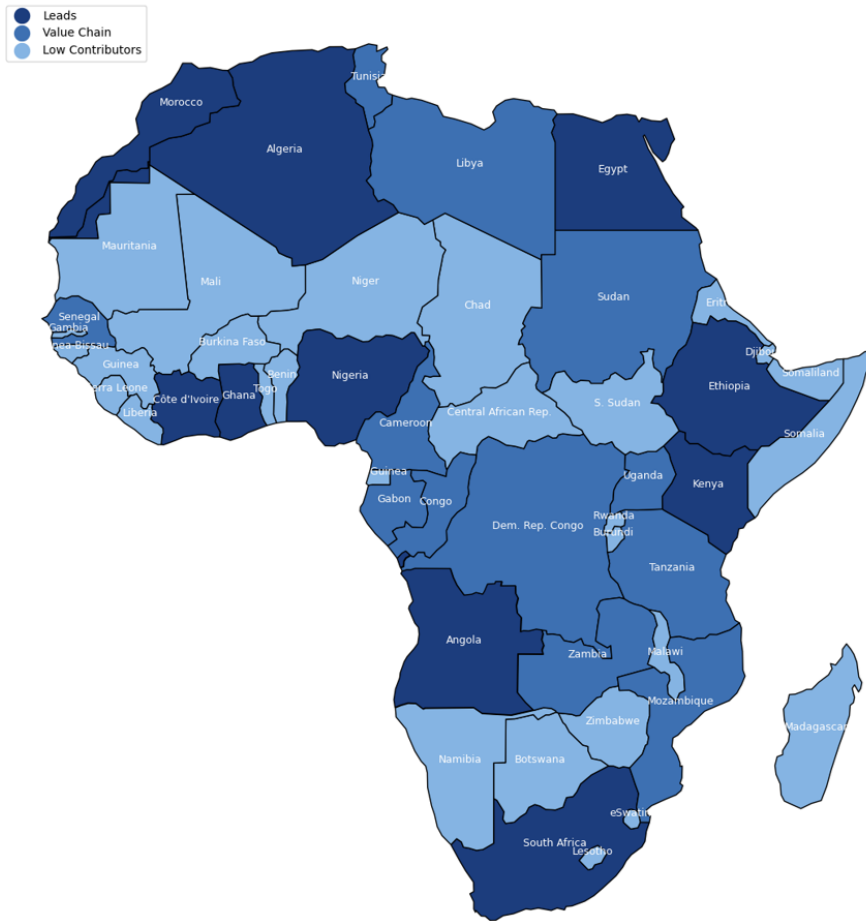
SAF Investment Decision Making Framework

Composite Index based on our own research and expert's views

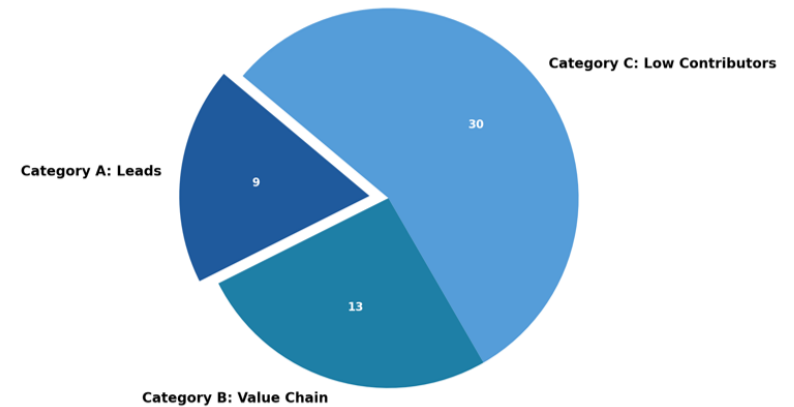


- **Thread #1.** The potential supply of SAF research was built around the SAF lifecycle stages, and took stock of the feedstock potential, refining capabilities, distribution and logistics options, infrastructure development and renewable energy metrics to determine production business models and correlated production pathways.
- **Thread #2.** A thorough demand and market analysis to understand the factors driving passenger demand for air travel, such as economic activity, seat capacity, consumer preferences, liberalization and travel patterns.
- **Thread #3.** A comprehensive review of current laws, incentives, and support systems was conducted to determine whether selected African states have an adequate regulatory and policy framework for SAF.

SAF Investment Decision Making Framework Application to Africa



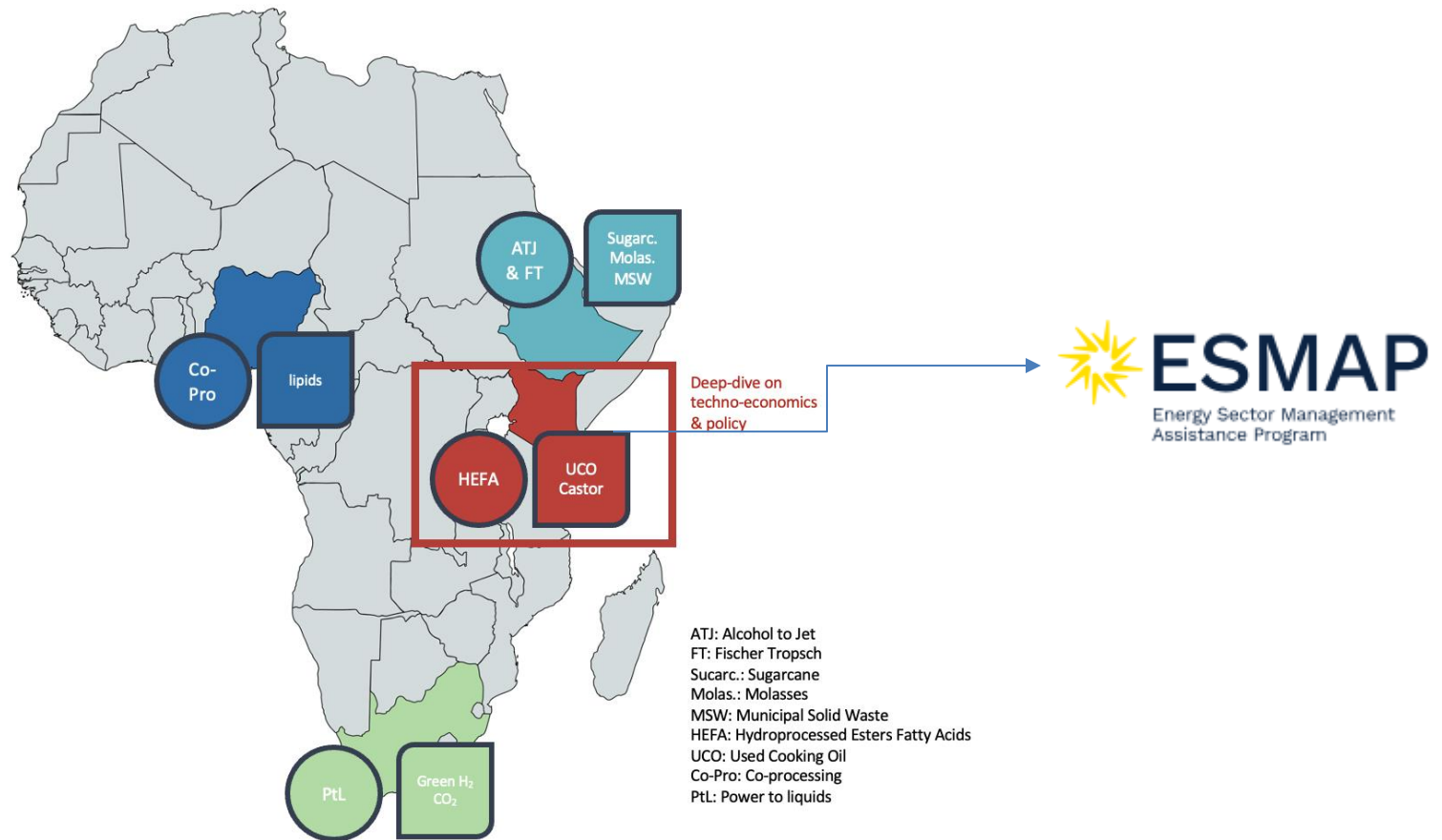
Summary of Initial Findings: SAF Decision Framework for Africa



Category	Description
C "Low Contributors"	<ul style="list-style-type: none"> Countries with a small GHG footprint Low Demand, Supply & Regulatory Framework Scores below 15
B "Value Chain"	<ul style="list-style-type: none"> Most countries, which are able. These have solid feedstock potential, but limited refining capabilities. Scores between 17-20
A "Leads"	<ul style="list-style-type: none"> Countries "ready, willing and able" Countries with good scores R,S & D Scores above 21

Country Deep Dives in Africa

Various feedstocks and technology pathway



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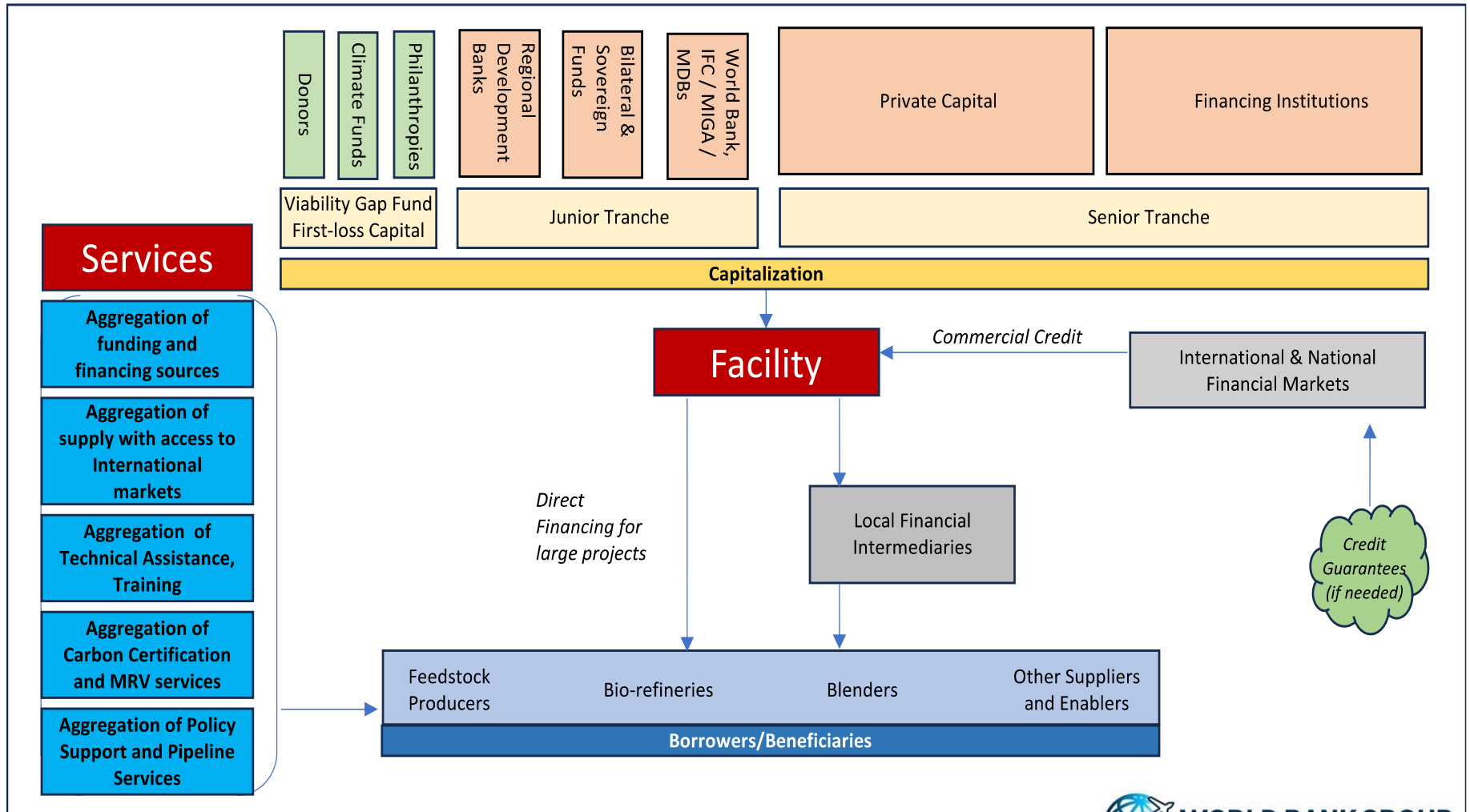
Thank You!

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Financing Aviation Decarbonization

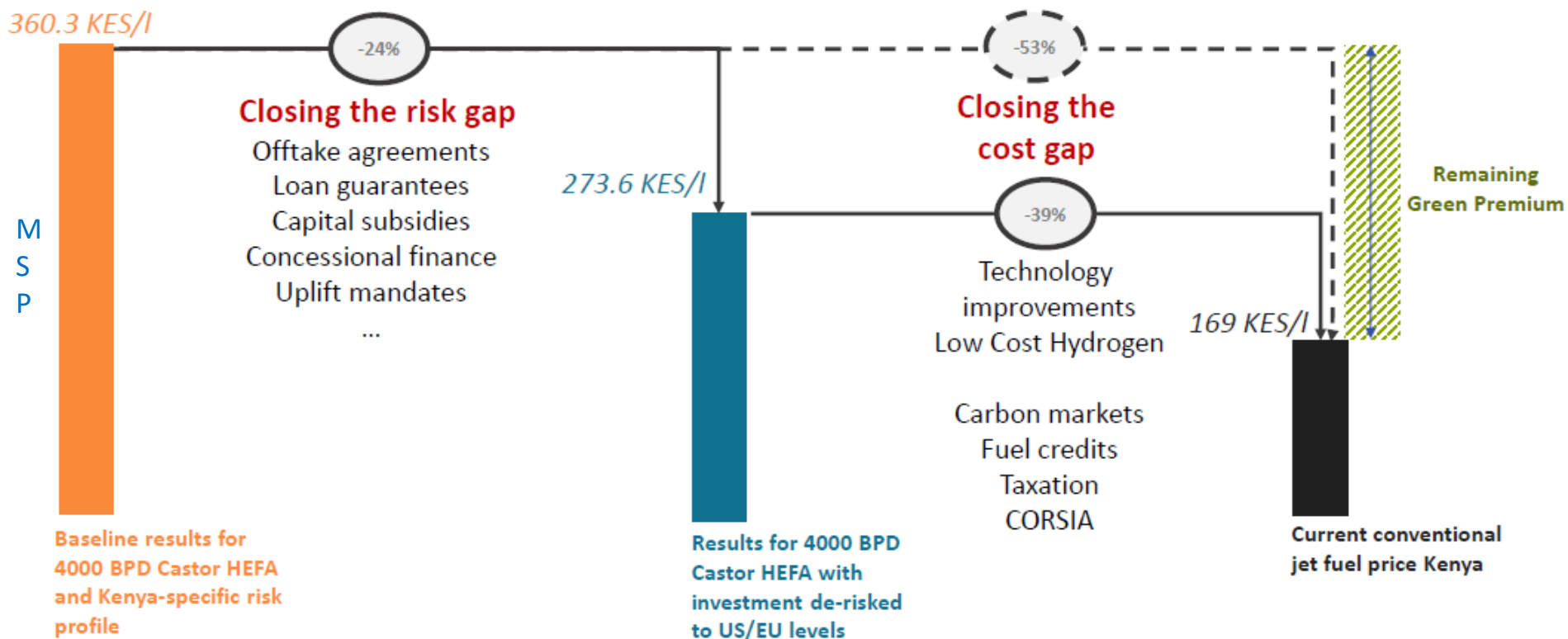
with a focus on SAF and World Bank client countries

Regional SAF Investment Financing Facility



Minimum SAF Selling Price (MSP) in Kenya

A "Coalition" will be needed to drive down risk premiums



World Bank (forthcoming)

Minimum Fuel selling price (MSP)

The MSP is the price that the SAF needs to be sold for an investor to meeting the expected rate of return. This is the SAF price at which the net present value of the refinery project equals zero.