

Ethanol 2-Pagers 2026 Market Summaries

Updated January 2026



**U.S. GRAINS &
BIOPRODUCTS
COUNCIL**

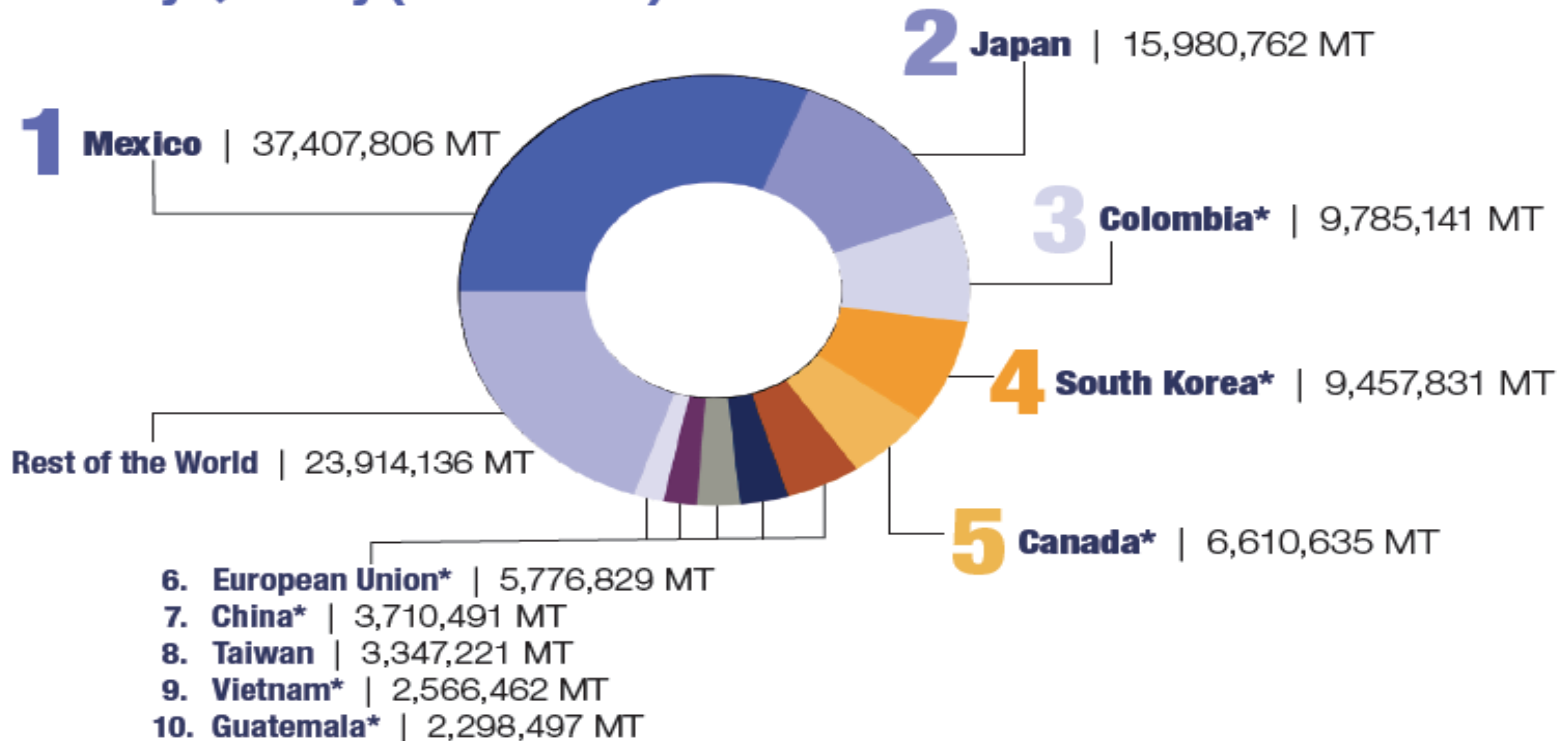
20 F St. NW, Suite 900 \ Washington, DC 20001
202-789-0789 \ www.grains.org



Where Are U.S. Grains In All Forms Going?

Top U.S. export customers in marketing year 2024/25

Rank by Quantity (Metric Tons)



Rank by Value

1. Mexico \$12.58 billion
2. Japan \$6.23 billion
3. South Korea* \$4.96 billion
4. Canada* \$4.73 billion
5. Colombia* \$2.89 billion
6. China* \$2.74 billion
7. European Union* \$2.01 billion
8. Taiwan \$1.66 billion
9. Guatemala* \$862 million
10. Vietnam* \$747 million
- Rest of the World \$10.96 billion

Source: USDA Foreign Agricultural Service's Global Agriculture Trading System report for marketing year September 1, 2024, to August 31, 2025.

* U.S. Grain in all Forms (GIAF) are sold based on contract and at varying rates. Therefore, top ranking for tonnage may not align with rankings in value.

For more information on GIAF calculations, visit grains.org.



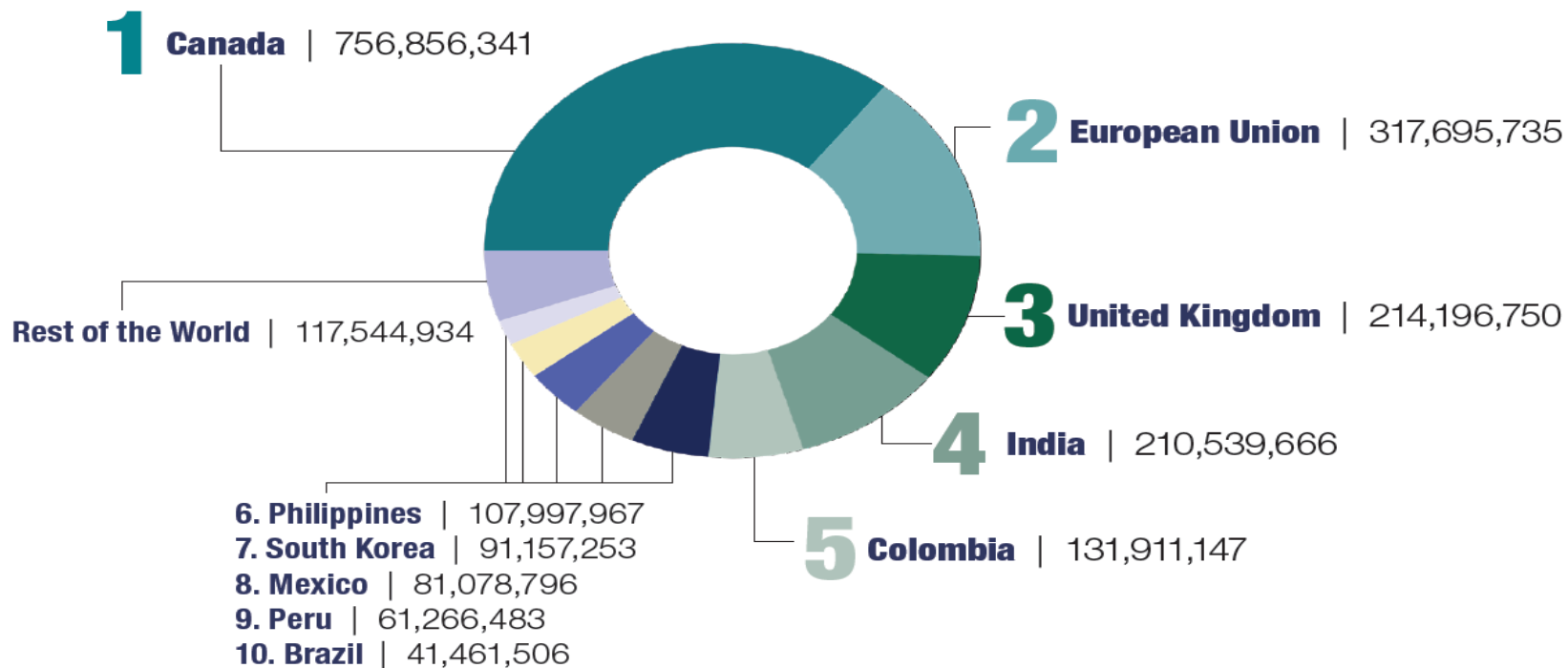
**U.S. GRAINS &
BIOPRODUCTS**
COUNCIL
grains.org



Where Is U.S. Ethanol Going?

Top U.S. export customers in marketing year 2024/25

Rank by Quantity (Gallons)



Rank by Value

1. **Canada** \$1,626,046,660
2. **European Union** \$669,398,541
3. **United Kingdom** \$468,039,563
4. **India** \$434,440,452
5. **Colombia** \$364,813,686
6. Philippines \$206,755,819
7. South Korea \$195,273,148
8. Mexico \$185,288,199
9. Peru \$137,494,507
10. Brazil \$80,155,394
- Rest of the World \$252,343,255

Source: USDA Foreign Agricultural Service's Global Agriculture Trading System report for marketing year September 1, 2024, to August 31, 2025.

* Ethanol is sold based on contract and at varying rates. Therefore, top ranking for gallons may not align with rankings in value.



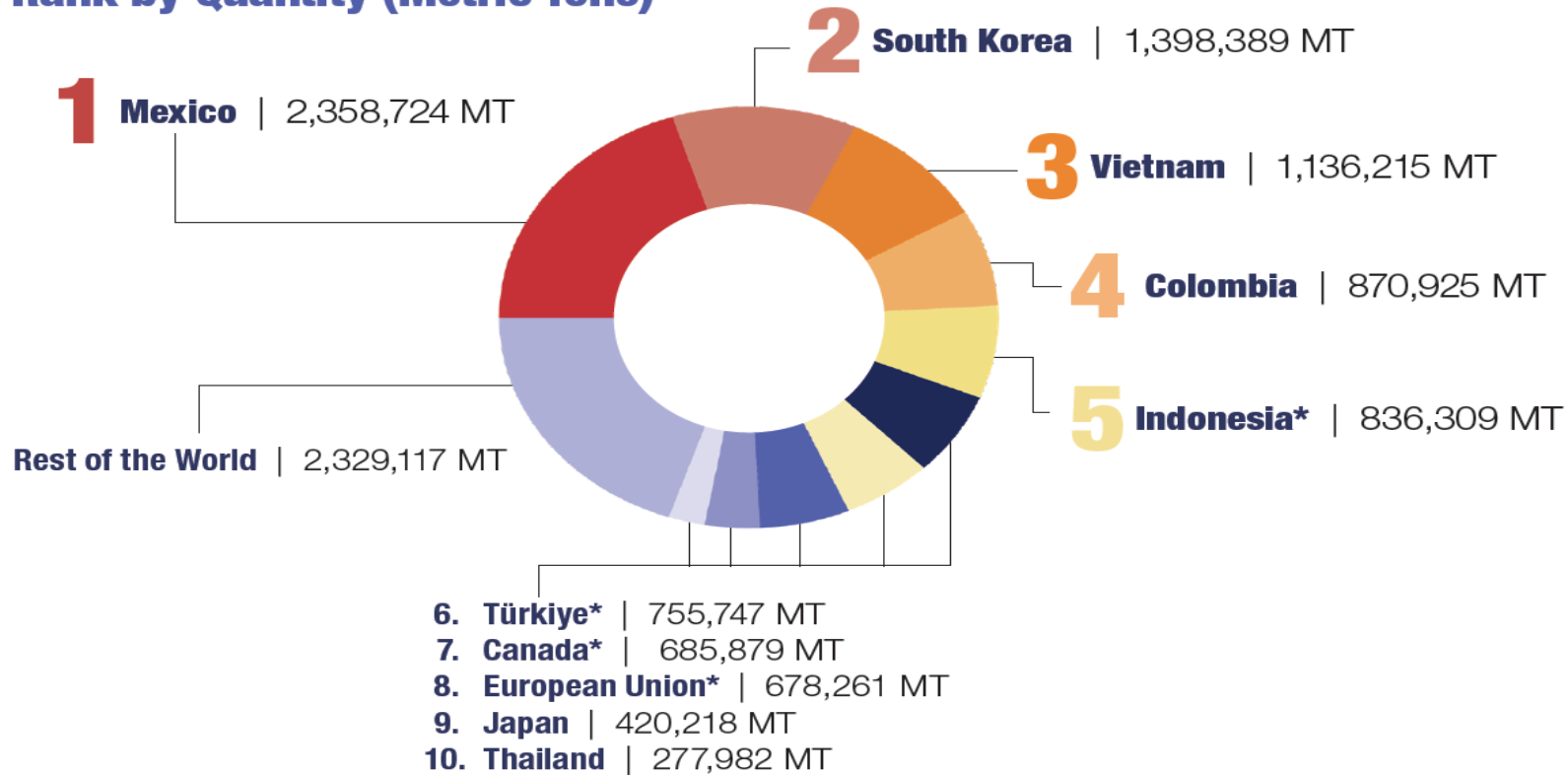
U.S. GRAINS & BIOPRODUCTS
COUNCIL
grains.org



Where Are U.S. DDGS Going?

Top U.S. export customers in marketing year 2024/25

Rank by Quantity (Metric Tons)



Rank by Value

1. Mexico \$539,080,023
2. South Korea \$306,359,267
3. Vietnam \$271,610,393
4. Colombia \$237,015,958
5. Türkiye* \$211,727,675
6. Indonesia* \$210,279,746
7. European Union* \$168,646,524
8. Canada* \$146,596,051
9. Japan \$95,592,863
10. Thailand \$69,480,961
- Rest of the World \$574,219,280

Source: USDA Foreign Agricultural Service's Global Agriculture Trading System report for marketing year September 1, 2024, to August 31, 2025.

*DDGS is sold based on contract and at varying rates. Therefore, top ranking for tonnage may not align with rankings in value.



**U.S. GRAINS &
BIOPRODUCTS**
COUNCIL
grains.org

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 12.4 billion gal; up 2% on the year.
- Ethanol production in Brazil for 2026 is projected to reach 10.5 billion gallons.
- During the same period, corn ethanol production in Brazil is expected to reach 2.9 billion gallons, representing 28% of the total ethanol production.

Supply/Demand Basics and Key Market Driver:

- Ethanol trade increased compared to the previous year, supported by modest imports in the second quarter of 2024.
- In CY 2025, imports to Brazil grew to 85 million gallons, with the United States holding a 44% market share, followed by Paraguay at 31%.
- Brazilian exports for 2025 decreased to 422 million gallons, down 15% on the year. The primary destinations for Brazilian exports included South Korea, which received 204 million gallons, the United States with 67 million gallons, and the Netherlands with 56 million gallons..

Current ethanol market in CY2025 (fuel and industrial million gallons)

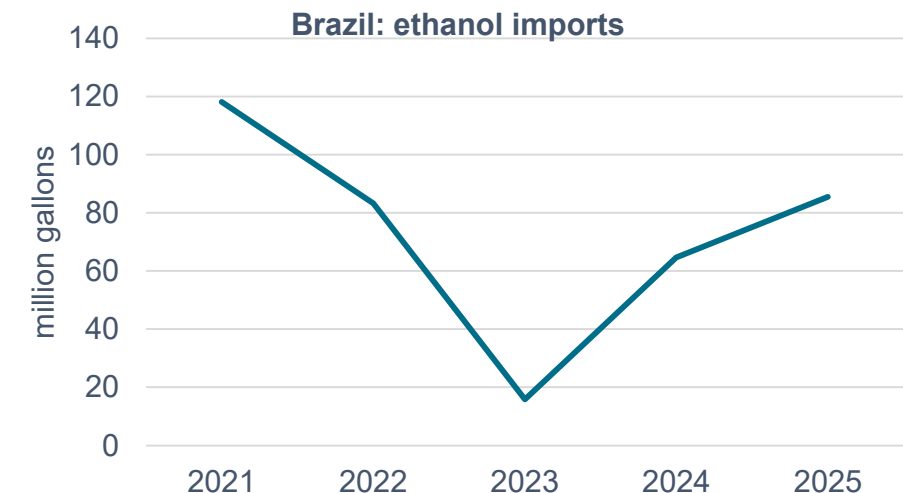
	Fuel Use	Industrial Use
Consumption	9,300	-
Production	9,900	-
Imports	85	-
Exports	102	320
Average Blend	28%	NA
Mandate Blend	30%	NA

Trade and Market Share Overview:

- **Import Tariff:** In March 2022, Brazil eliminated the duty on all ethanol imports to help reduce inflation. However, since 2024 a 18% duty was reinstated on U.S. ethanol imports.
- Due to the combination of the import tariff and the surge in Brazilian corn ethanol production, arbitrage opportunities for U.S. ethanol imports have remained limited.
- However, it is worth noting that despite small volumes the U.S. was the main origin of Brazilian ethanol imports, representing 44% of total imports in 2025.

Policy Overview:

- In August 2025, Brazil implemented the increase in the mandatory blend to 30%. The higher mandate brings an additional 345 to 395 million gallons of anhydrous ethanol demand per year.
- In Brazil, the RenovaBio program saw an increase in lawsuits filed by small and medium-sized distributors due to the financial burden caused by the policy.
- The first ethanol importer was certified in 2025, opening the door to a small volume of ethanol from one U.S. producer.



Source: Comextat

Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Resume the duty-free treatment that Brazil granted to all U.S. ethanol imports before 2017.	After Brazil resumed the duty on all ethanol imports, the Council partnered with the Association of Fuel Importers to formally request an elimination on duties to Mercosur and Brazil arguing that the duties are beneficial for domestic producers but has dramatically impacted the end consumers due to the increased prices at the pump. Both requests were rejected by the Chamber of Foreign Trade at the Ministry of Development, Industry, Trade and Services.	Motivate the permanent duty-free access for U.S. ethanol to guarantee the supply in the North and the Northeast region.	Facilitate market access for all ethanol imports and recover the market share that US ethanol industry had in the Northeast region. Export market potential of around 130 million gallons is projected.
Technical	Allow full participation of U.S. ethanol plants in the RenovaBio program.	After permanent engagements with the National Agency of Petroleum (ANP), Brazil set the rules to certify US product. In 2025 ANP updated several technical reports related to the certification of producers and the penalty for US corn ethanol. Also, the first ethanol importer was certified in 2025 to import from an US ethanol producer and generate Cbios.	Continue to advocate for the recognition of U.S. regulation that will reduce data requirement for the RenovaBio certification.	Restore continuity of U.S ethanol exports to Brazil and gain full access to the Carbon Credits (Cbios) market.

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 13 billion gallons
- Canada was the largest year-over-year export market for U.S. ethanol in MY 2024/25, importing 757 million gallons valued at \$1.6 billion.
- Canada's production of fuel ethanol has fulfilled about 67% of the domestic demand for the past 10 years with U.S. ethanol fulfilling the remaining 5% blending requirement under the Clean Fuel Regulation (CFR).

Supply/Demand Basics and Key Market Drivers:

- Canada is the top export destination import market for U.S. ethanol, importing 757 million gallons valued at \$1.6 billion in MY 2024/25.
- Minimum 5% national blending under the current CFR.
- The current national average blend rate has exceeded the CFS requirement since 2012, driven by provincial mandates in Quebec, Ontario, British Columbia and Saskatchewan.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

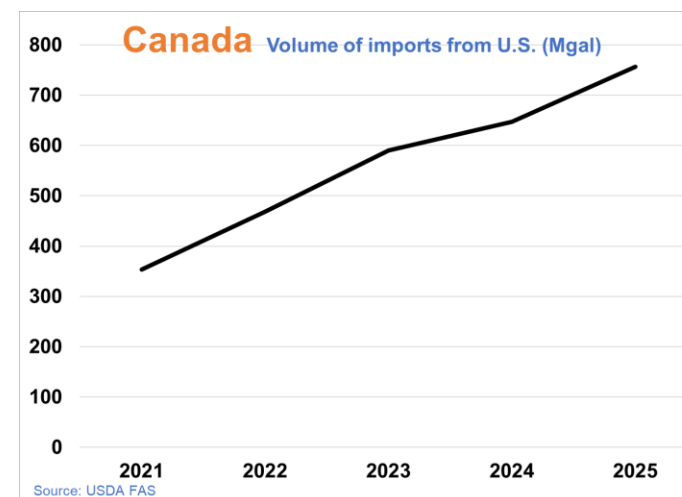
	Fuel Use	Industrial Use
Consumption	1157	NA
Production	466	NA
Imports	691	NA
Exports	30	NA
Average Blend	8%	NA
Mandate Blend	5%	NA

Trade and Market Share Overview:

- **Tariff rate:** N/A
- Nearly 100% U.S. market share for fuel ethanol imports

Policy Overview:

- In 2025, Quebec (QC) began rolling out its 12 percent renewable content in gasoline and 5 percent in diesel requirements.
- In 2025, Ontario (ON) began rolling out its 11 percent renewable content in gasoline and 4 percent in diesel requirements. Following the changes to the CTF in August 2025, domestic bio-based content requirements are now in effect for both diesel fuel and gasoline.
- In December 2023, British Columbia (BC) released its revamped low-carbon fuels program and established a SAF mandate (starting with 1 percent in 2028), while targeting an E15 average blend. As of 2026, renewable fuels produced in Canada must be used to meet the minimum 5 percent renewable fuel requirement for gasoline. As of April 2025, the renewable fuel requirement for diesel doubled to 8 percent and must be produced in Canada.
- As of December 2024, 6 provinces have low-carbon fuel mandates.
- In July 2022, final CFR regulations were published with resolved language addressing the previous issues of land use and biodiversity (LUB) criteria and CCS credit generation.
- In November 2023, Canada approved the U.S. application for legislative recognition (LR) of the LUB.
- The U.S. industry continues to work with Environment and Climate Change Canada (ECCC) to ensure a level playing field for CFR implementation.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
<p>Policy</p>	<p>Policy changes at both federal and provincial levels for carbon reduction goals and increased use of renewable fuels present opportunities for increased ethanol use. By expanding engagement efforts at the provincial level, Canada's average ethanol blend rate will continue to exceed the 5% national mandate.</p>	<p>Throughout 2025, the Council engaged with Canadian government officials at the federal level, including members of the Canadian parliament, department officials at Environment and Climate Change Canada (ECCC), Natural Resources Canada (NRCan), among others, domestic biofuels industry groups, private sector entities along the fuel supply chain, and FAS Ottawa to increase ethanol blend mandates at the federal and provincial levels, and address and eliminate potential market barriers within the Clean Fuel Regulations (CFR). Two missions took place in 2025 (Grain Export Mission or GEM, in June and the State Executive Mission or SEM, in October), both of which featured specific ethanol components.</p> <p>In addition, the Council engaged on the following items:</p> <ul style="list-style-type: none"> - Submitted comments on the Clean BC Review - Submitted comments on the BC LCFS Carbon Capture and Storage Intentions Paper - Drafted comments on the upcoming 2026 USMCA review with other industry members. 	<p>The Council will continue to collaborate with close allies Renewable Industries Canada (RICan) and Advanced Biofuels Canada (ABC) as reliable and strong partners in trade and to increase the use of biofuels. The Council will also maintain contact with relevant policymakers to address any trade barrier or implementation issues associated with the CFR, especially given the potential uncertainty in Canada resulting from ongoing bilateral trade tensions, newly instated domestic content requirements for renewable fuel content in both Ontario and British Columbia, recent proposals for targeted amendments to the CFR, and the 2026 USMCA review.</p>	<p>Higher blend levels and increased U.S. ethanol exports as Canada will continue to rely on imports to satisfy internal demand. Export market potential of around 775 million gallons is projected.</p>

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 1.37 billion gallons; 1.5%.
- Expected to service approximately 4.5 million light-duty vehicles.
- Chile is the 4th largest fuel market in South America after Brazil, Argentina and Colombia.
- Gasoline demand is expected to reach 1.5 billion gallons by 2030.
- Chile is a major gasoline importer in LTA. The U.S. remains a key supplier of fossil fuels.

Supply/Demand Basics and Key Market Driver:

- Chile has high fuel quality standards but remains one of the few countries in LTA still using MTBE as a gasoline oxygenate.
- The Chilean government and private sector have historically avoided ethanol due to the lack of domestic production, despite the option to rely on imports.
- The key drivers for ethanol adoption include: 1. ethanol as a cost-effective replacement for MTBE, 2. support for transportation decarbonization goals, and 3. reductions in toxic fuel emissions to improve air quality.
- Chile could adopt E10 in the near term without vehicle compatibility constraints. E15 could be feasible by around 2030 as the vehicle fleet continues to turn over.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

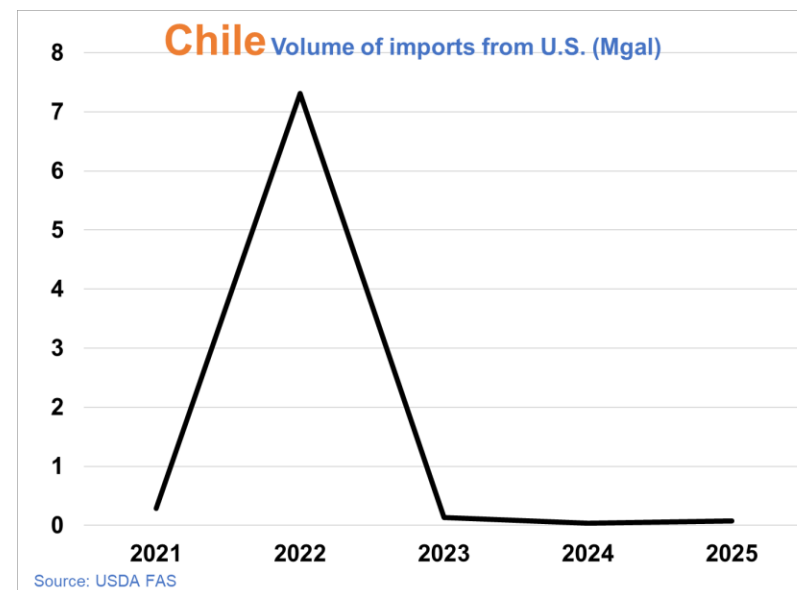
	Fuel Use	Industrial Use
Consumption	-	-
Production	-	-
Imports	-	10
Exports	-	0
Average Blend	0%	NA
Mandate Blend	5% (not enforced)	NA

Trade and Market Share Overview:

- **Tariff rate: 6%** MFN tariff rate for industrial and fuel ethanol. Ethanol imports from the United States enter Chile duty-free under the Chile–U.S. Free Trade Agreement.
- Chile's 3-year average industrial ethanol imports are +10 million gallons, sourced mainly from Argentina and Bolivia, with limited volumes from other suppliers including U.S..

Policy Overview:

- There is no ethanol mandate in Chile. Fuel regulations allow E2 - E5, but no ethanol is blended.
- Chile is updating fuel specifications toward EURO VI standards to improve air quality, with a focus on reducing volatile organic compounds (VOCs).
- For many years, Chile's decarbonization strategy prioritized electric vehicles and changes in transportation modes.
- More recently, the government has begun to reconsider the role of biofuels, particularly ethanol, as part of its clean energy and air-quality strategy.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Assist key government entities (Ministry of Energy and Ministry of Environment) to develop policies recognizing the value of implementing ethanol-gasoline blends.	<p>After signing a Memorandum of Understanding with ENAP and the Ministry of Energy, the Council supported a study showing that Chile can blend E10 at the refinery level with minor infrastructure upgrades.</p> <p>Implementation will require the Ministry of Transportation to assess vehicle compatibility and the Ministry of Environment to evaluate emissions impacts under E10, as both analyses are still ongoing.</p> <p>In 2025, Chile elected a new administration under President José Antonio Kast. The incoming government has expressed interest in renewing the MOU with USGBC and is considering a new program to incorporate biofuels, particularly ethanol, into Chile's energy matrix.</p>	Incorporate ethanol blending as a part of the Government's measures to decarbonize transportation.	Incorporate ethanol into public policies to demonstrate its emission reduction and decarbonization qualities to open the Chilean market to ethanol use.
	Ensure Chile substitutes MTBE use for ethanol and implements a blend mandate.		Achieve proscription of MTBE as an oxygenate in gasoline and incorporate ethanol in refining process.	Allow for consideration of U.S. ethanol imports, with an estimated potential of approximately 135 million gallons under an E10 mandate by 2030.
Technical	Demonstrate ethanol's technical benefits over other oxygenates such as MTBE and methanol.	<p>In 2025, Chile elected a new administration under President José Antonio Kast. The incoming government has expressed interest in renewing the MOU with USGBC and is considering a new program to incorporate biofuels, particularly ethanol, into Chile's energy matrix.</p>	Materialize the effective substitution of MTBE for ethanol by ENAP.	Successfully demonstrate that ethanol is a technically superior and more cost-effective option.
	Demonstrate logistical feasibility of incorporating ethanol use within existing fuel infrastructure.		Dispel any technical concerns associated with the incorporation of ethanol into Chile's fuel logistics infrastructure and provide a cost estimate.	Gain ENAP's validation of the technical and economic feasibility of incorporating ethanol blending within existing fuels infrastructure.

Country Overview:

- **Annual Gasoline Consumption / Growth Projection:** 53.7 billion gallons/ -2.4%
- China’s economy expanded at a 5% annual pace in 2025, slower than the previous year but in line with Beijing’s target. Burgeoning domestic sales of electric vehicles are cutting into oil demand for road transport.
- Electric vehicle adoption reduced domestic fuel ethanol demand, while synthetic ethanol production from coal doubled. China is positioning itself as a major sustainable aviation fuel exporter with significant new production capacity coming online. The Maritime sector seems poised to adopt a biofuels directive in the future.

Supply/Demand Basics and Key Market Driver:

- Fuel ethanol use in the PRC is expected to reach about 1.14 billion gallons in 2025, a 11% drop from 2024, due to slower gasoline demand, rising electric vehicle use, and the absence of a new blending policy. The average fuel ethanol blend rate is around 2.1%, below the 2009 peak of 2.8%. The E10 mandate hasn't expanded since 2019, and pilot expansions haven't been implemented.
- Production is forecast at about 1.14 billion gallons in 2025, similar to consumption, with minimal trade, and is expected to decline by 11% due to policy uncertainty, lower gasoline demand, and industry consolidation.

Current ethanol market in MY2024/2025

(fuel and industrial million gallons)

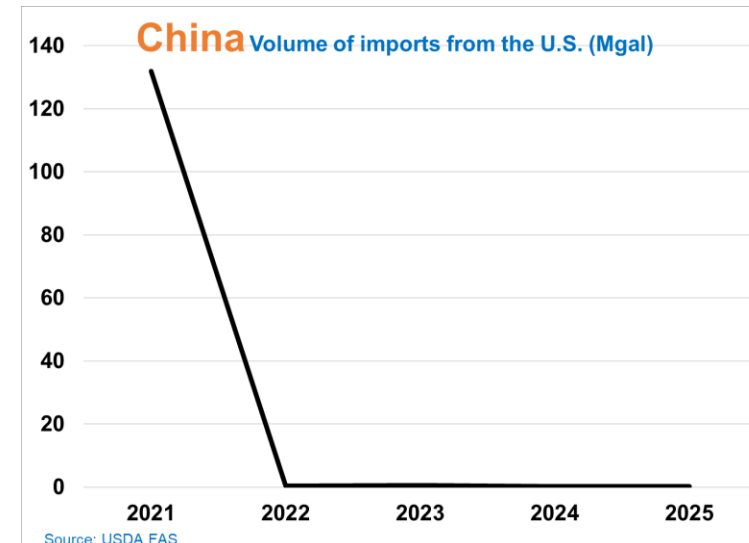
	Fuel Use	Industrial Use
Consumption	1.14 Billion	200 Million
Production	1.14 Billion	140 Million
Imports	1 Million	NA
Exports	3.7 Million	3.6
Average Blend	2.1%	NA
Mandate Blend	10%	NA

Trade and Market Share Overview:

- Ethanol imports are under 1 million gallons in 2025, remaining negligible due to high tariffs and limited domestic demand. Exports are about 3–4 million gallons, mainly undenatured ethanol to Asian markets for industrial and medical use, with volumes volatile and opportunistic.
- The 80% tariff on denatured ethanol, including WTO, Section 232, and Section 301 tariffs, persists since 2018, plus the 10% additional tariff (Nov 2025) , making U.S. ethanol uncompetitive in China.
- In 2025, imports stay minimal, while China’s exports to Asia remain steady, driven by niche industrial demand.

Policy Overview:

- Chinese law restricts fuel ethanol processing to licensed facilities serving national refiners and fuel companies. No licensing changes occurred in 2024–2025.
- China has been a top producer and consumer of MTBE since 2013, which dominates the gasoline oxygenate market and limits fuel ethanol blending growth.
- In February 2022, the State Council instructed officials to “strictly control the corn-based fuel ethanol processing industry.” As of 2025, this guidance remains, and corn ethanol capacity has not expanded, likely keeping output at current levels.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Maintain the E10 mandate where possible and continue to promote the use of bioethanol for SAF.	Although the E10 mandate could not be expanded into new provinces/cities, we maintained the status quo without any policy change in 2025.	Reinforce the E10 implementation in Heilongjiang, Hebei, and Jiangsu; Expand E10 in Hubei province.	Maintain the current 1 billion gallons of fuel ethanol demand and seek potential demand expansion towards SAF & marine.
	Develop and maintain a positive and favorable policy environment for biofuel.	<p>Maintained investment and promotion efforts in social media/state media/industry publications to promote biofuel's benefits, re-engage the Chinese stakeholders, and regain their interest.</p> <p>Maintained working-level engagement with NEAs, aiming to enforce the current E10 mandate via any means necessary.</p>	<p>Develop a favorable public opinion on biofuels. Work with media and industry stakeholders on biofuel policies and standards, as China aims to be carbon neutral by 2060.</p> <p>Use lifecycle analysis on domestic ethanol feedstock to reinforce our message on ethanol's environmental benefits.</p>	Defend the biofuel policy in China where grain security concerns adversely impacted biofuel development from time to time.
Technical	Address technical issues, challenges from MTBE, methanol, coal-based ethanol sectors	Advocated biofuels over other competing oxygenates, including methanol, coal-based ethanol, and MTBE, at several industry conferences and via social media.	<p>Develop new partnerships with oil companies, automakers, maritime shipping industries, and third-country partners to promote a green alternative.</p> <p>Enhance the understanding of biofuel's role in decarbonizing ALL transportation sectors (Land, Sea, and Air).</p>	Gain more support from all current and future bioethanol consuming industries, particularly ATJ or SAF

Country Overview:

- **Annual Gasoline Consumption / Growth Projection:** 2.2 billion gallons; 1.5%
- Regular gasoline (RON 89 - AKI 84) dominates the market, accounting for 95%, while Premium gasoline (RON 97 - AKI 94) holds a modest 5% market share.
- By the end of 2025, U.S. ethanol exports account for 55% of Colombia's national ethanol consumption, with domestic production meeting the remaining 45%.
- Despite the countervailing duty (CVD) on U.S. ethanol being extended until 2028, U.S. ethanol exports to Colombia, surpassed 131 million gallons in the MY 2024/2025 marketing (\$365 million).
- Colombia has established itself as the fifth-largest destination for U.S. ethanol exports in the 2024/25 marketing year and is the leading market in Latin America.

Supply/Demand Basics and Key Market Driver:

- In 2025, Colombia's ethanol production could not fully meet the E10 mandatory blend due to production and operational constraints. Seven ethanol plants produced about 100 million gallons of fuel ethanol.
- Domestic producers have raised concerns that increased reliance by gasoline distributors and retailers on imported ethanol, mainly from the U.S., has negatively impacted the demand for locally produced ethanol. This shift was attributed to the greater price competitiveness and supply reliability of imports.

Current ethanol market in MY2024/2025

(fuel and industrial million gallons)

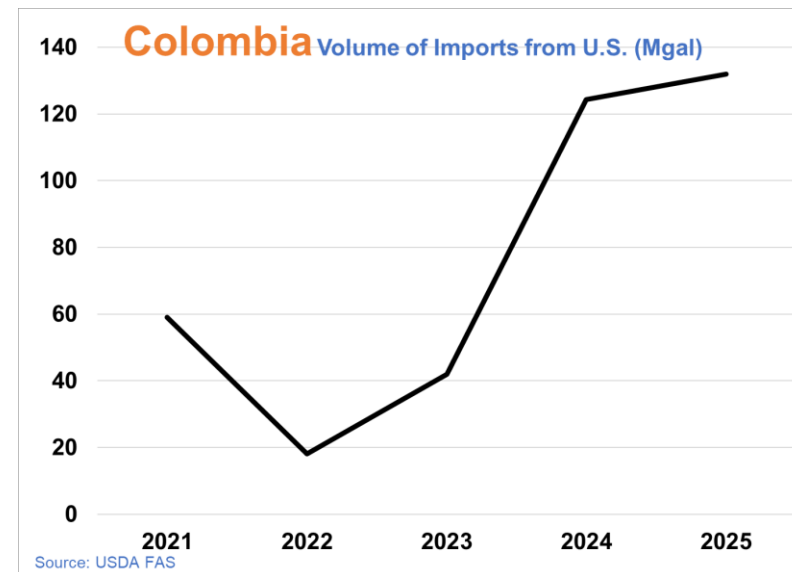
	Fuel Use	Industrial Use
Consumption	232	30
Production	100	22
Imports	132	8
Exports	0	-
Average Blend	10%	NA
Mandate Blend	10%	NA

Trade and Market Share Overview:

- **Tariff rate:** Since 2018, ethanol has entered Colombia duty-free under the U.S.-Colombia FTA. However, in 2020, Colombia imposed a \$0.066/kg (\$0.052/liter) countervailing duty (CVD) on U.S. ethanol imports.
- In March 2023, the Colombian Government extended the CVD on U.S. ethanol for five years, with a review in March 2026, despite the January 2023 Essential Facts Report recommending its reevaluation or a 50% reduction.
- The Ministry of Environment and Sustainable Development established in 2017 a maximum carbon intensity (CI) value for fuel ethanol's GHG inventory.

Policy Overview:

- Since February 2024, the Colombian Ministry of Mines and Energy has maintained the E10 ethanol blend rate. In previous years, the blend rate fluctuated between E2-E8.
- President Petro administration has focused on reducing fossil fuels reliance and has increased the price of the gasoline in almost 80% since 2022.
- In 2025, the MEM released regulations to restructure the IP ethanol price and reorganize the supply market.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Maintain and increase ethanol blend rate and eliminate the price setting mechanism for imported ethanol.	<p>Collaborating with the Ministry of Mines and Energy and other key stakeholders to highlight the importance of maintaining the E10 ethanol-gasoline blend and exploring actions required to increase it to E14 potentially.</p> <p>Colombia is evaluating the potential removal of the price-setting mechanism for fuel ethanol.</p> <p>In 2025, Colombia continued phasing out the gasoline subsidy, gradually increasing the consumer price by approximately US\$3 per gallon over the past three years.</p>	Maintain the nationwide E10 blend rate and explore increasing it to E14, while also allowing higher voluntary blends (E85).	<p>Increase U.S. ethanol competitiveness and increase U.S. ethanol exports to Colombia. Maintain market share above 50%.</p> <p>The potential volume of ethanol exports to Colombia under E14 could reach 200 million gallons per year.</p>
	Eliminate or reduce CVD measures on U.S. ethanol imports.	Compile all legal and technical arguments from the Countervailing Duty (CVD) investigation process and build strategic alliances with existing and new stakeholders and business partners to protect the duty-free access of U.S. ethanol.	Eliminate or reduce the CVD measures under the current investigation.	Reduce any attempts to open a CVD investigation with other trade partners and bring back duty-free access for US ethanol.

Country Overview:

- **Annual Gasoline Consumption/Growth Projection:** 400 million gallons per year; 2%
- The country has a vehicle fleet of about 2 million vehicles, with an average age of roughly 11 years. Electric vehicle adoption is growing rapidly, faster than in most LTA markets, but EVs still represent a small share of the total fleet.
- Costa Rica imports 100% of its gasoline, primarily from the United States, through the state fuel importer RECOPE.
- The gasoline market is split between 95 RON premium (55%) and 91 RON regular (45%), making CR one of the few LTA markets where premium gasoline exceeds regular gasoline.

Supply/Demand Basics and Key Market Driver:

- Costa Rica has faced challenges in implementing ethanol-gasoline blending due to limited inter-institutional coordination and opposition from key sectors (fuel distributors and consumers).
- A voluntary ethanol-blending regulation approved in 2016 has not been enforced.
- In 2024-2025, the government advanced internal decrees and conducted consultations to launch an ethanol-blending program.
- The administration of President Chaves announced plans to launch an E10 program in 2025 to address emissions and environmental concerns.
- However, political constraints and limited domestic support prevented implementation in 2025, resulting in a rescheduled launch of the ethanol blending program now expected in 2027.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

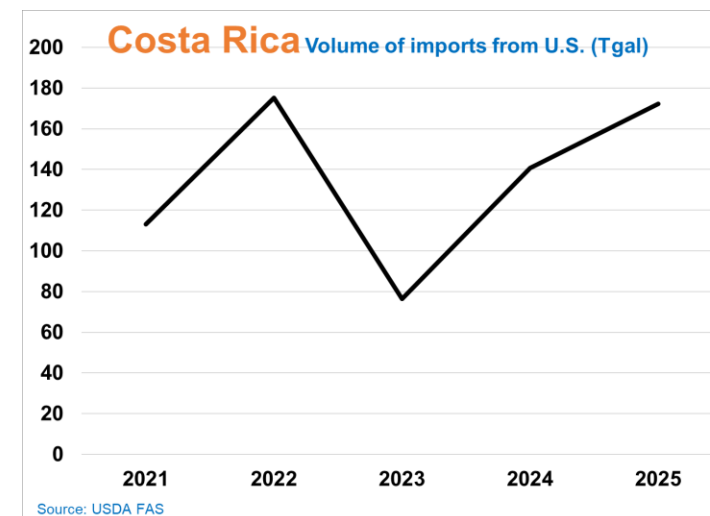
	Fuel Use	Industrial Use
Consumption	0	NA
Production	0	NA
Imports	0	0.2
Exports	0	3
Average Blend	0%	NA
Mandate Blend	0%	NA

Trade and Market Share Overview:

- **Tariff Rate:** Costa Rica applies a 10% MFN tariff on imported industrial ethanol and a 14% tariff on fuel ethanol. Under the U.S.–CAFTA-DR Free Trade Agreement, U.S. industrial and fuel ethanol enter Costa Rica duty free.
- Other ethanol exporters, such as Brazil, may seek access to the Costa Rican market, but would face MFN tariffs.
- U.S. ethanol exports to Costa Rica have remained minimal in recent years, totaling ~150,000 gallons in 2025, consisting primarily of industrial ethanol.

Policy Overview:

- Previous ethanol efforts, including 2019, faced consumer resistance and opposition from fuel and vehicle distributors.
- Despite Costa Rica’s renewable electricity matrix, progress in transport decarbonization has been limited.
- The administration of President Rodrigo Chaves supported an ethanol blending program to reduce transport emissions, with energy security and rural development as secondary goals. As of January 2026, the program has not been implemented.
- Presidential elections will be held in February 2026, with a new government taking office in April 2026.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Support the implementation of an ethanol blending policy in collaboration with MINAE and RECOPE, with an initial focus on institutional coordination and policy design.	<p>In 2025, progress focused on building the institutional and technical foundation for an ethanol blending program.</p> <p>Launching Costa Rica's ethanol-gasoline blending program requires strong coordination across multiple government agencies. USGBC supported the creation of an ethanol promotion group (APE), including USGBC, IICA, MINAE, and ARESEP, which helped improve coordination and alignment among government, private sector, and technical stakeholders.</p>	Continue engagements with new administration taking office in 2026 and rebuild the foundations for a blend policy.	Gain support from the incoming administration and enable a potential market of up to approximately 40 million gallons under a nationwide E10 mandate.
	Demonstrate the benefits of blend levels beyond 8% and establish the mandate at E10.	USGBC also actively participated in public and technical events on energy transition, helping to address misconceptions about ethanol's impacts on vehicles and the environment.	Focus on providing technical and academic information that offers support for implementing a blending policy.	Ensure that the government and the citizenships identify the alignment of ethanol use with public policy goals.
Technical	Provide comprehensive technical documentation and support to strengthen the Government's capacity, with the goal of assuring the Costa Rican public about the safety of ethanol-gasoline blending.	USGBC also actively participated in public and technical events on energy transition, helping to address misconceptions about ethanol's impacts on vehicles and the environment.	Ongoing engagement and training for policymakers, focusing on the impacts of ethanol blending and supporting informed decision-making and effective public communication.	Ensure government officials and key stakeholders are well-equipped to advocate for the implementation of an ethanol blend policy.
	Support the National Oil Refinery (RECOPE) in evaluating the environmental and economic benefits of ethanol blending, as well as in assessing the long-term role of ethanol within Costa Rica's fuel distribution and logistics system.	Executed programs to help RECOPE explore institutional and operational adjustments to facilitate the distribution and integration of renewable fuels, including ethanol.	Continue supporting the transformation of RECOPE towards the distribution of renewable fuels.	Create conditions to mainstream sustainable fuels, including ethanol, within the country, supported by strengthened institutional capacity and public confidence.

CTA Triangle: El Salvador, Guatemala, and Honduras

Ethanol Market Snapshot 2026

Country Overview:

- The Central American Technical Regulations (RTCA) set gasoline standards for Guatemala, Honduras, and El Salvador, including 88 RON regular and 95 RON premium gasoline. Most gasoline is imported from the U.S.
- Together, these three countries consume +1.4 billion gallons of gasoline per year.
- Guatemala represents roughly 55% of total consumption, making it the largest gasoline market among them, with supply mainly sourced from the U.S.

Supply/Demand Basics and Key Market Driver:

- Guatemala has five sugarcane ethanol distilleries, producing 70 million gallons of ethanol per year. El Salvador has an ethanol production capacity of about 15 million gallons per year, while Honduras produces less than 1 million gallons annually.
- Total regional ethanol production capacity is about 85 million gallons per year. Guatemala exports much of its ethanol, mainly to Europe and previously to the U.S.
- An E10 blending mandate in the CTA Triangle would create ethanol demand of approximately 140 million gallons per year.
- If an E10 mandate is implemented, local production would not meet demand. This would create a market opportunity of over 100 million gallons per year for U.S. ethanol exports.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

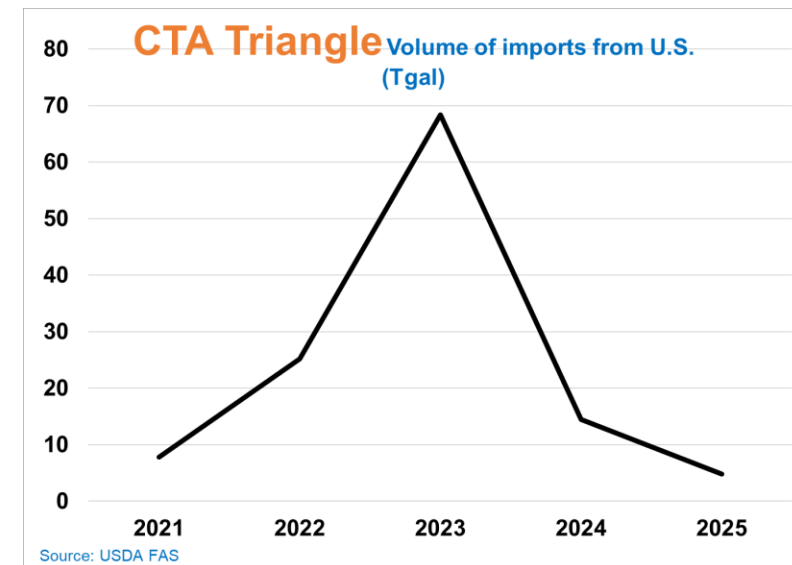
	Fuel Use	Industrial Use
Consumption	-	NA
Production	85	NA
Imports	-	2
Exports	65	25
Average Blend	0%	NA
Mandate Blend	10% (Guatemala)	NA

Trade and Market Share Overview:

- El Salvador and Guatemala apply a 40% MFN tariff on imported fuel and industrial ethanol, while Honduras applies a 15% MFN tariff.
- Under the U.S.–CAFTA-DR Free Trade Agreement, U.S. industrial and fuel ethanol enter all three countries duty free (0% tariff).
- U.S. ethanol exports to Guatemala, Honduras, and El Salvador remain very limited, totaling just over 15,000 gallons in 2025.

Policy Overview:

- In December 2025, Guatemala issued a new regulation for ethanol blending, confirming the government's commitment to launch a nationwide E10 program on July 1, 2026.
- In Honduras, Decree 144-2007 provides legal framework for biofuels but does not mandate ethanol blending. Congress is reviewing biofuels legislation that could allow ethanol blends (E5).
- Guatemala, Honduras, and El Salvador are currently politically aligned with the U.S, which supports continued cooperation on energy policy, trade, and the potential expansion of ethanol use across the region. In 2025, the U.S. agreed on trade frameworks with Guatemala and El Salvador.



CTA Triangle: El Salvador, Guatemala, and Honduras

Ethanol Market Snapshot 2026

Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Ensure that CTA countries incorporate ethanol blending with gasoline as part of their public policies, reflecting recent regulatory commitments and strengthened trade cooperation with the United States.	<p>In December 2025, Guatemala issued an updated ethanol regulation confirming its commitment to implement a nationwide E10 ethanol blending program starting July 1, 2026. The regulation promotes open competition, environmental sustainability, and the use of low-carbon ethanol.</p> <p>In 2025, the United States signed trade framework agreements with Guatemala and El Salvador, strengthening bilateral cooperation on trade, energy, and regulatory alignment.</p>	Advocate for policymakers and key stakeholders to recognize the value of ethanol, support the successful implementation of Guatemala's E10 mandate, and encourage policy alignment in Honduras and El Salvador.	Implement an ethanol blend mandate in CTA triangle countries that could create an export opportunity of approximately 100 million gallons per year.
	Ensure that CTA governments and regulators understand the required legal and operational framework to implement ethanol blends.		Improve government officials' comprehension of ethanol usage.	Acquire skilled and informed policymakers and regulators to ensure the successful implementation and clear communication of ethanol blend mandates.
Technical	Ensure that regional gasoline and ethanol specifications are developed or modified to enable ethanol blending, aligned with RTCA standards and national implementation timelines.	<p>The USGBC reviewed biofuels legislation under discussion in Honduras and engaged with local stakeholders to highlight the role of ethanol blending and free market in energy and environmental policy.</p> <p>The Council engaged with the Central American Integration System (SICA) and CTA governments to support the review and updating of RTCA gasoline and biofuels specifications. USGBC-supported technical studies on gasoline quality and ethanol blending facilitated discussions as Guatemala prepared for E10 implementation in 2026.</p>	Help formulate RTCA specifications for gasoline blended with ethanol.	Standardize regional fuel specs to enable and facilitate the implementation of national ethanol blend mandates, reducing technical barriers and supporting market integration.
	Ensure that gasoline quality implications of ethanol blending are appropriately understood and communicated.		Evaluate and quantify the distinct advantages of ethanol blending concerning fuel quality for countries in the CTA Triangle.	Promote the benefits of ethanol blending for fuel quality by presenting clear, technical, and non-controversial arguments.

Country Overview:

- **Annual Gasoline Consumption:** 560 million gallons in 2025–2026, with a market split of about 40% regular gasoline and 60% premium gasoline.
- The Dominican Republic (DR) is a net importer of fuels, with the U.S. as its primary supplier.
- The country operates an active refinery, REFIDOMSA, with a capacity of approximately 34,000 barrels per day, supplying +40% of domestic fuel demand.
- Gasoline demand in the DR has shown consistent annual growth of approximately 4%, driven by economic activity, tourism, and vehicle fleet expansion.

Supply/Demand Basics and Key Market Driver:

- The Dominican Republic has not developed a fuel ethanol production capacity or blending program to date.
- The main drivers for ethanol use are: 1. compliance with environmental objectives, 2. improvements in refinery economics, and 3. integration with current distribution systems.
- Blending E10 could present an opportunity to reduce gasoline production and import costs, although this would ultimately depend on market conditions and ethanol pricing.
- In addition, the DR large tourism and aviation sector creates long-term potential for Sustainable Aviation Fuel (SAF), as the country received in 2025 more than 11 million tourists and its airports handle +100,000 commercial flights annually.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

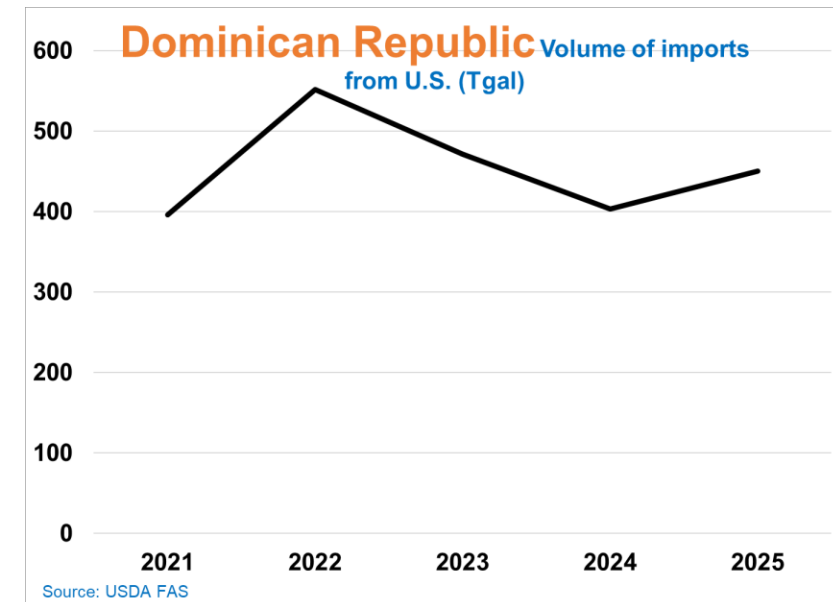
	Fuel Use	Industrial Use
Consumption	-	NA
Production	-	-
Imports	-	NA
Exports	-	NA
Average Blend	0%	NA
Mandate Blend	0%	NA

Trade and Market Share Overview:

- **Tariff rate:** 14% MFN duty on imported fuel and industrial ethanol.
- U.S. industrial and fuel ethanol are tariff free (0% rate) under the U.S-CAFTA-DR FTA schedule.

Policy Overview:

- There is no active program to produce or blend biofuels in the DR. However, legal and regulatory groundwork has existed since 2007.
- Decree No. 65-23 (Article 75) assigns the Ministry of Commerce responsibility for developing regulations to commercialize fuel ethanol, oxygenated gasoline, and biodiesel.
- Technical specifications for ethanol and ethanol-blended fuels are defined under NORDOM 653, providing a regulatory basis for future implementation.
- The Council is working with the Ministry of Commerce to evaluate the benefits of ethanol blending and assess options for a future blending mandate.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Ensure that the DR incorporates ethanol blending as part of its environmental policies to improve fuel quality, decarbonize transportation and improve air quality.	<p>The Council presented the results of a study that assessed the impact of ethanol in gasoline quality, price and emissions to REFIDOMSA. The USGBC also participated in a USDA ATM to promote the nationwide use of ethanol in DR.</p> <p>Engagements with the Ministry of Commerce has created interest in assessing the economic benefits of using ethanol to reduce government subsidies on fuels.</p>	Create a roadmap to assess and implement ethanol blending in the DR, ideally under a blend mandate.	Enable the DR to implement an ethanol blending mandate through government appropriations and policies, enabling a potential import market of +55 million gallons per year .
	Ensure that REFIDOMSA validates the economic benefits of ethanol blending in its refining operations and incorporates its use.		Quantify the specific benefits in refining margin for REFIDOMSA from incorporating ethanol blending.	Receive technical validation by REFIDOMSA to incorporate ethanol use in the company's refining operations.
Technical	Ensure that gasoline distributors validate the economic benefits of ethanol-blended gasoline to move them in the direction of importing preblended product or to import ethanol and blend locally.		Eliminate taxes applied to ethanol.	Enable price competitiveness of ethanol compared with imported gasoline and facilitate access to the DR.

Country Overview:

- **Annual Gasoline Consumption/Growth Projection:** 1.4 billion gallons; 2%.
- Service approx. 2.8 million vehicles.
- Fifth largest gasoline market in South America after Brazil, Argentina, Colombia and Chile.
- Ecuador is an oil-producing country but imports high-octane gasoline to blend in its refining process.
- In 2025, Ecuador experienced a challenging year characterized by elections, insecurity and violence.

Supply/Demand Basics and Key Market Driver:

- Ethanol consumption in Ecuador is linked to the Ecopais program, which exclusively uses locally produced ethanol in the southern/coastal region of the country (average blend is 3.5%).
- In 2022, Ecuador introduced Ecoplus 89, which contains 8% ethanol; however, the program was discontinued in 2023 due to insufficient promotion and demand.
- While the Ecopais program aimed for a E10 blend, limitations in local production capacity and inadequate logistics infrastructure have kept the blend level below 5%.
- With a nationwide E10 blend mandate, Ecuador's ethanol consumption would be approximately 140 million gallons yearly.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

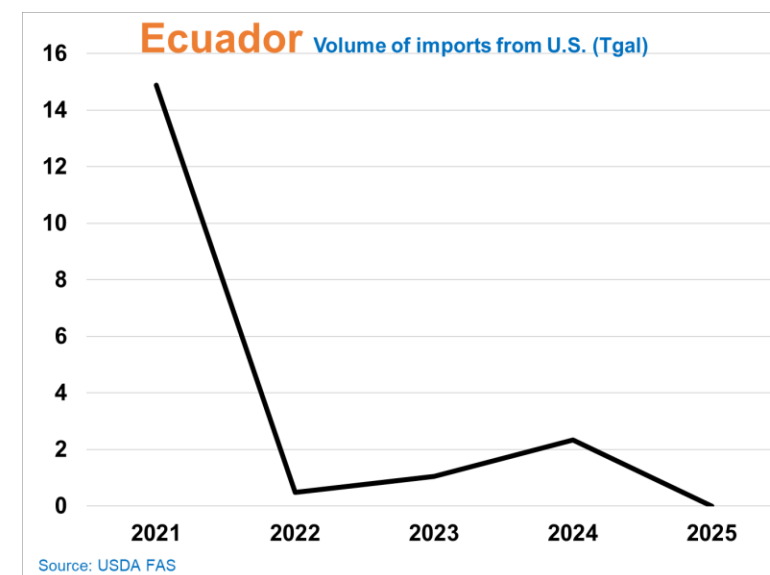
	Fuel Use	Industrial Use
Consumption	30	NA
Production	33	NA
Imports	-	0.02
Exports	1.9	1.2
Average Blend	2.5%	NA
Mandate Blend	Up to 10%	NA

Trade and Market Share Overview:

- **Tariff rate:** Approx. 0.84% MFN duty on imported industrial ethanol, 15% on fuel ethanol (exoneration achieved under 2021 Economic Development and Fiscal Organic Law).
- Ethanol exports consist mostly of industrial ethanol to Colombia and Perú.
- Energy and agriculture, rather than trade policies, have determined the use of locally-produced ethanol in Ecuador's gasoline blends.

Policy Overview:

- Ethanol consumption is dependent on the existing mandate under the Ecopais program.
- Since 2023, Ecuador liberalized the price of the premium gasoline and reduced the subsidy for Ecopais and Extra gasoline.
- Locally-produced ethanol procurement volumes and prices continue to be set by the government through contracts between the national oil company and local producers.
- The policy of exclusively using locally-produced ethanol has been detrimental to the achievement of higher blend levels because of its limited production capacity.
- In 2025, Ecuador agreed on a trade framework with the U.S. which could open opportunities for ethanol trade to fulfill an E10 nationwide blend rate.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Increase total ethanol blend level and incorporate imports.	<p>In 2025, the Council continued strengthening the ethanol promotion group with the domestic producers, Petroecuador and the Ministry of Energy.</p> <p>As part of the activities discussed in the group, the Council advanced an infrastructure assessment to handle U.S. ethanol exports and E10 countrywide.</p>	Work with the Ministry of Energy to implement a nationwide E10 blend mandate.	Create a market of opportunity for approx. 140 Million gallons per year under an effective E10 blend mandate.
	Develop a mechanism for U.S. ethanol to complement local production under higher blend levels.		USGBC and APALE continue working on Ecuador's logistics and infrastructure capacity for importing ethanol from the United States and increasing the nationwide blend to E10.	Enable the long-term sustainability of the market through establishing the mechanism to supply the market with local production and U.S. imports.
Technical	Modify INEN gasoline specifications to allow for ethanol blending at a 10% level in all gasolines.		Engage with the Ministry of Energy and Ecuador's regulating agencies to present the technical case for blend levels beyond 10%.	Increase the market opportunity for U.S. ethanol to supplement local production through higher blend levels.
	Modify ethanol water content specifications to allow for 1% water content to improve competitiveness of U.S. ethanol.		Achieve modification of INEN 375 to increase the allowable water content in fuel ethanol.	Improve price competitiveness of U.S. ethanol by standardizing Ecuador's ethanol specifications to meet current U.S. standards.

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 26.4 billion gallons.
- Biofuels continue to be the primary renewable transport energy source in Europe.
- Increased concern over the debunked food and fuel conflict has caused hesitation among policy makers unfamiliar with the product.
- Low margins in 2023 slowed domestic ethanol production into Q1 of 2024.

Supply/Demand Basics and Key Market Driver:

- In MY 2024/25, exports to EU-27 reached a record-setting 318 million gallons, making Europe the second-largest ethanol export market, valued at \$669 million.
- Increased ethanol consumption in the EU is attributed to policies driving the increased adoption of E10 across member states.
- EU currently has 53 first-generation ethanol plants in operation with a combined nameplate capacity of 2.1 billion gallons.
- The EU is one of the largest markets for U.S. ethanol and the longer-term goal is for the European government to allow full access to corn-based ethanol in its policy revisions based on its science-based carbon reduction benefits.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

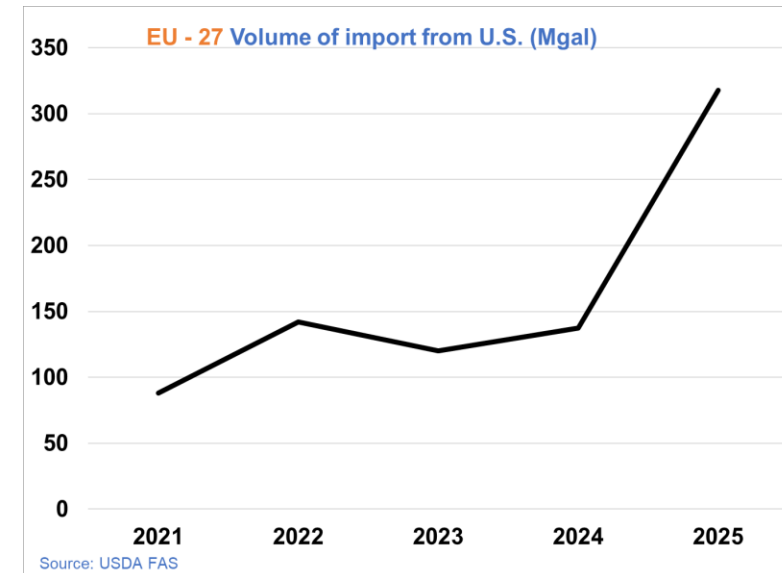
	Fuel Use	Industrial Use
Consumption	1823	N/A
Production	1455	N/A
Exports	26	N/A
Imports	331	N/A
Average Blend	7.5%	N/A
Mandate Blend	Up to 10% as per the Fuel Quality Directive (FQD)	N/A

Trade and Market Share Overview:

- **Import tariff:** €0.192/liter (Undenatured ethanol), €0.102/liter (Denatured ethanol).
- The EU tariffs for ethanol for fuel use differ depending on its purity: undenatured ethanol is taxed at 19.2 Euro per hL; Denatured Ethanol is taxed at 10.2 Euro per hL.
- In addition, the EU has several trade preferences for individual countries, regional blocs, and trade development programs.

Policy Overview:

- As of December 2025, 19 of 27 EU member states utilize or mandate E10.
- In 2023, 4 European countries utilize E10 as the standard grade.
- As countries transpose new legislation pertaining to higher biofuel blending rates, ethanol demand is expected to be driven by higher member state mandates.
- In September 2023, the EU initiated a retrospective surveillance measure on fuel ethanol across all countries exporting to the EU; not a trade barrier at this time.
- In 2018, the EU updated the Renewable Energy Directive (REDII), setting a 14% target share of renewable fuels for the transport sector by 2030.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Continue to grow current exports to the EU.	Organized ethanol trade missions to Brussels, a follow-up visit to Rome and engaged with buyers and importers and further developed relationships with the industry stakeholders in the EU.	<p>Achieve E10 blending across all member states.</p> <p>Eliminate existing ethanol tariffs and other trade preferences.</p>	Reach 400 million gallons of U.S. ethanol exports into the EU.
	Advocate among EU Member States, stakeholders, and other entities for increasing the use of low-carbon fuels such as ethanol to help decrease GHG emissions from the global transportation sector.	<p>Enhanced ties with IEA by joining its Technology Collaboration Program's (TCP) Task 39 on biofuels for transport.</p> <p>Continued working with additional organizations (OECD, FAO, ITF, World Bank) to show that ethanol is a sustainable and immediate solution to reduce GHG emissions and particulate matter in the EU and globally.</p> <p>Continued to develop relationships with diverse organizations through our on-ground consultancy firm.</p>	<p>EU Member States, organizations, and other European stakeholders to introduce first-generation grain-based ethanol as a solution that brings immediate GHG reduction benefits in the EU and globally.</p> <p>Identify new stakeholders and NGO entities relevant to ethanol messaging and use.</p>	Create and grow partnerships with diverse entities that become broader champions of ethanol in the EU and globally.

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** ~15 billion gallons; 6.9% growth.
- India is the fastest-growing gasoline consumer in the world.
- India has ambitions to be the world leader in biofuels policy and ethanol technology manufacturing. The India-led Global Biofuels Alliance has now put together its secretariat and is moving toward large-scale ethanol promotion globally.
- E20 blend rate has been reached. They are expected to announce “E30 by 2030” during the 2026 marketing year. There is no roadmap today.

Supply/Demand Basics and Key Market Driver:

- The ethanol blending rate in India hit 20%, and just over 2.68 billion gallons of ethanol were supplied by Indian ethanol plants to achieve that blend rate. This was ahead of the pace set by the Indian government (E20 by October 2026).
- Ethanol demand for 2026/2027 is pegged at 2.8 billion gallons for a 20% blend. Corn is expected to be the feedstock for over 1.4 billion gallons of that supply.
- India is likely to continue to import ethanol for industrial use and imports could be up to 230 million gallons in 2026. The country’s industrial ethanol users have begun to use some Indian ethanol – primarily from C-Heavy molasses, as it is the only feedstock whose prices can compete with imported ethanol.
- India has overbuilt its capacity by a considerable margin. When considering India’s ethanol capacity planned through 2026 vs. its demand for E30 by 2030, they are already over capacity by 1.75 billion gallons. This has led to producers and government looking at export markets and increased domestic uses, such as SAF and SMF.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

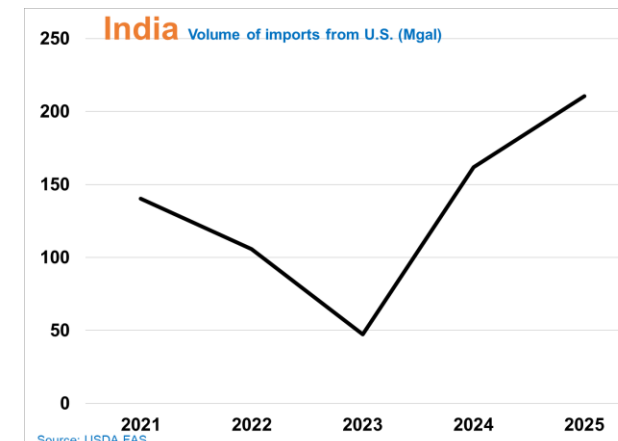
	Fuel Use	Industrial Use
Consumption	2,684	220
Production	2,684	9
Imports	-	211
Exports	-	-
Average Blend	20%	NA
Mandate Blend	20%	NA

Trade and Market Share Overview:

- 97% of industrial ethanol imported into India is of U.S. origin. India is the third largest market for U.S. ethanol.
- The U.S. does not export any fuel ethanol to India.
- The auto industry is beginning to push back against the government’s plans to move to E30. Public outcry has begun, and the auto industry is at the center of the outrage, along with the government. Lack of consumer education is apparent and the consequences are being felt.

Policy Overview:

- No fuel-grade ethanol or raw material is allowed to be imported; however, discussions have begun around raw material imports.
- The Indian government has been publicly calling on ethanol producers to export ethanol. First gen ethanol is still not allowed to be exported, but they did open exports for second gen ethanol.
- Corn continues to be the primary feedstock, following a policy shift in December 2023. However, the government has released over 10 MMT of rice for ethanol production in 2025 and 2026.
- SAF blends are mandated at 1% by 2027, 2% in 2028, and 5% by 2030. Alcohol-to-jet will be the primary technology for SAF implementation, but there has yet to be a roadmap put in place nor a gallon of commercially produced SAF in India. The roadmap will be put together by the Global Biofuels Alliance and SAF Association. It is expected to be completed in 2026.
- SMF is an emerging story in India. Tugboats at ports are beginning to run trials on SMF, and the government is eager to expand ethanol’s use wherever they can, including SMF.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	<p>Provide influence over the Global Biofuels Alliance.</p> <p>Help India develop a roadmap to SAF, ensuring the success of all stakeholders.</p> <p>Ensure corn is the primary source for ethanol production in India.</p> <p>Continue to reinforce the U.S. as a potential trade partner to cover any fuel ethanol shortfall.</p> <p>Ensure India's blend rate is pushed to 30 by 2030.</p> <p>Use India as a tool to showcase to the global south that ethanol is a viable option to reduce fuel costs and emissions</p>	<p>Corn remains the primary feedstock for ethanol plants in India, despite pressure from the sugar industry (42% of total production from less than 1% in 2023).</p> <p>The Council has cemented itself with the Global Biofuels Alliance and SAF Alliance. It is part of the committee that will help inform the SAF roadmap for India.</p> <p>The Council has utilized its goodwill to find collaboration opportunities with the Ministry of Petroleum and Natural Gas and the Federation of Indian Petroleum Industries. Collaborations are targeted at aiding India's quest for E30 and helping temper public outcry.</p> <p>Pakistan is now recommending a 5 percent blend (not mandated, but likely soon), and Nepal is now mandating a 10 percent blend.</p>	<p>Solidify India as a major hub for SAF production and refueling.</p> <p>Create policy that makes an attractive space for investors in the SAF space by informing India's SAF roadmap.</p> <p>Influence global SAF policy via the Global Biofuels Alliance Secretariat.</p> <p>Ensure India's blend mandates continue to climb, soaking up all domestically produced ethanol within the country and creating opportunities for export, should India fall short.</p> <p>Increase blend mandates in global south countries by using India as an example.</p>	<p>85 million gallons of ethanol for SAF production by 2030.</p> <p>Limited impact in the fuel ethanol space.</p> <p>140 million gallons of demand for ethanol in Pakistan.</p> <p>21 million gallons of demand for ethanol in Nepal.</p>
Technical	<p>Encourage India to adopt its own SAF GHG model, using GREET as a baseline.</p> <p>Conduct a pilot project to showcase the viability of ethanol cookstoves in India.</p>	<p>The Council contracted Indian Institute of Petroleum to conduct an LCA on Indian corn alcohol to jet, using GREET as a baseline. This will be complete during Q2 2026.</p> <p>The ethanol cookstove pilot project identified multiple families in three different regions; however, PESO approval eludes the Council, as it is stuck in bureaucratic loops. Currently, this is a top priority for the Council.</p>	<p>Showcase the commercial viability of ethanol cookstoves in India.</p> <p>Ensure alcohol-to-jet is the primary feedstock for India's future SAF production, while also ensuring that U.S. ethanol/SAF is not precluded from trading into the Indian market for SAF production or end use.</p>	<p>400 million gallons of ethanol into cookstoves, if 10% adoption is achieved.</p> <p>85 million gallons of ethanol for SAF production by 2030.</p>

Country Overview:

- **Annual Gasoline Consumption/Growth Projection:** 9.7 billion gallons; 3% YoY growth.
- Expected to grow to become the world's fifth or sixth-largest gasoline market.
- Domestic gasoline refinery capacity is 4.5 billion gallons per year. Actual production in 2025 is estimated at 4.0 billion gallons. Imported gasoline currently supplies over 50% of total consumption.
- Indonesia aims to achieve net-zero emissions by 2060. The country has set out to achieve 23% and 31% renewable energy use by 2025 and 2050, respectively.

Supply/Demand Basics and Key Market Drivers:

- Feedstock constraints make current domestic ethanol production prohibitively expensive. The current market price for domestic ethanol is approximately \$1.90 per gallon. Recent downtrend in domestic ethanol is attributed to faltering molasses price.
- Indonesia's 2025 National Budget allocates \$7 billion for fuel subsidies. Gasoline accounted for 55-60% of total subsidies.
- Pertamina's Balikpapan refinery upgrade is increasing capacity by 0.6 billion gallons in 2026. Main grade of gasoline is RON90, though there are plans to phase the grade out in 2025 and use RON92 as the main grade.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

	Fuel Use	Industrial Use
Consumption	0.04	42.0
Production	0.04	54.1
Imports	0*	2.0
Exports	0	14.2
Average Blend	0%	NA
Mandate Blend	5%	NA

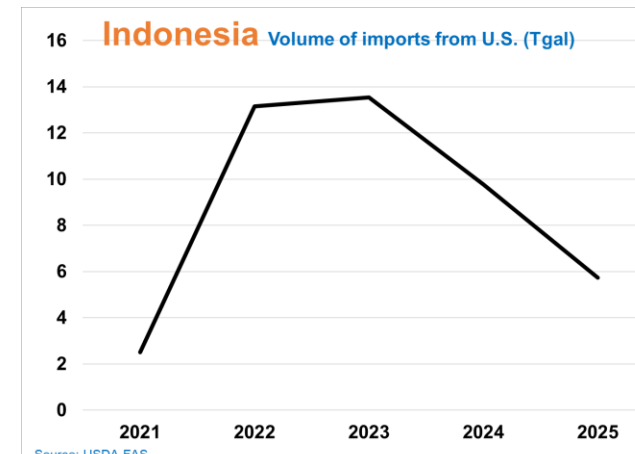
*Indonesia currently imports fuel ethanol via pre-blended gasoline imports

Trade and Market Share Overview:

- **Tariff rate:** 30%
- Ethanol is uncompetitive compared to other octanes (MTBE at 5% and Benzene at 0%). Unfair advantage for other octanes results in over-reliance on MTBE and Benzene for Pertamina and other fuel marketers. This tariff is prohibitive for imports and results in minimal tax revenue generation.
- Pertamina's gasoline import specifications allow maximum ethanol content at 3% volume. Gasoline imported to Indonesia mainly originates from Singapore, where traders opt for ethanol as a RON enhancer when there are favorable pricing conditions v.s aromatics (e.g., MTBE).

Policy Overview:

- Ethanol blending of 3.5-5% was introduced in 2007. Ethanol blending halted in 2010 due to high domestic ethanol prices.
- Pertamina in 2023 introduced E5 blended gasoline branded as Pertamax Green RON95 in a pilot program of 17 retail stations in Jakarta & Surabaya. The pilot has now expanded to 160 stations as of December 2025. The pilot is fully supplied by domestic ethanol.
- Government of Indonesia in 2025 announced plans to introduce an E10 mandate by 2028. The E10 roadmap is expected to be published by 1Q 2026 with phased implementation starting with RON92 and above in Java and Bali.
- MEMR Regulation No.4/2025 currently prohibits import if biofuels including ethanol.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Provide Pertamina necessary technical support to expand E5 pilot / prepare for E10 implementation.	<p>Wider relationship building with Pertamina NRE with NDA signed to facilitate exchange of information between USGBC and PNRE. Senior PNRE leadership (CEO & Director of Strategy) was subsequently invited to GES 2025.</p> <p>Conducted corn procurement workshop with Pertamina NRE to support feedstock diversification away from molasses as a counter to Brazil and India's influence.</p>	<p>MOU with Pertamina NRE to evaluate domestic ethanol production parallel to trade opportunities. The MOU would serve to strengthen our relationship with PNRE and counter the influence of alternative origin imports.</p> <p>Technical support for Patra Niaga (PN) to assist E10 implementation with industry study visit to Thailand / Philippines. Despite E5 pilot ongoing, PN has identified knowledge gaps in handling higher blend of E10. Blending economics remain weak with E5 pilot.</p>	<p>917 million gallons potential market for nationwide E10 implementation.</p>
	Government engagement on E10 mandate and removal of ethanol import ban in MEMR 4/2025.	<p>Tentative reduction of import tariff for U.S. ethanol based on announcement by CMEA. Pending details from trade agreement framework. This was based on multiple engagements and position papers highlighting the import tariff.</p> <p>The government of Indonesia in 2025 announced a policy plan to implement an E10 mandate by 2027. The Council will continue to engage MEMR to minimize import apprehension in the development of the E10 roadmap.</p>	<p>Ethanol policy workshop to showcase U.S. and Philippines implementation success. By replicating the Philippines model, E10 can be achieved with domestic producers supportive of supplemental imports. This serves to influence policy making for E10 roadmap.</p>	
	Advocate ethanol blending to oil companies in Singapore and Malaysia supplying Indonesia.	<p>The Council continued to engage traders and gasoline blenders in Singapore to highlight the growing ethanol opportunity in the region and address challenges for gasoline blending. Underscored impacts to regional blending and trading should pending/targeted mandates realize or expand, such as Indonesia's E10 policy.</p> <p>The volume of U.S. ethanol exports to Singapore in MY 2023/24 ranked second highest in history.</p>	<p>Continued engagement with major trading house and oil companies to drive ethanol adoption / increase ethanol trade flows to Singapore.</p>	

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 200 million gallons, 1.7%
- More than 300,000 vehicles, dominated by gasoline-powered light-duty vehicles and motorcycles.
- Jamaica depends on imported fuels, which make up over 30% of total merchandise imports.
- Jamaica is the only country in the Caribbean and Central America with a long-standing mandatory ethanol blending program, implementing E10 since 2010.

Supply/Demand Basics and Key Market Driver:

- During the 2010s, Jamaica produced ethanol domestically utilizing both local and imported feedstocks, and at times, exported ethanol to international markets, including the U.S.
- By 2010, Jamaica’s ethanol production capacity was nearly 80 million gallons per year across three plants. All are now non-operational, with no concrete plans to restart production.
- There is no domestic ethanol production, leaving the country fully reliant on imports.
- Jamaica has ranked among the Top 10 destinations for U.S. ethanol exports in recent years.
- Looking ahead, policy discussions could support a future increase to E15, raising demand to 35 million gallons per year.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

	Fuel Use	Industrial Use
Consumption	20	NA
Production	0	-
Imports	20	NA
Exports	0	NA
Average Blend	10%	NA
Mandate Blend	10%	NA

Trade and Market Share Overview:

- As a CARICOM member, Jamaica uses the Common External Tariff (CET) for products imported from outside CARICOM. Average applied tariffs on manufactured goods in Jamaica have been around 9 %.
- Jamaica is an English-speaking economy with close ties to the U.S., which is its top trading partner (accounting for over 40% of total trade). 100% of the ethanol used in the country is imported from the United States
- Proximity to the U.S., skilled labor, and modern SEZs support opportunities in services, logistics, energy, and agribusiness. However, market size, high energy and security costs, and logistical bottlenecks remain constraints.

Policy Overview:

- Jamaica implemented a mandatory E10 ethanol blend in 2010, establishing the country as a Caribbean pioneer with more than a decade of effective program implementation.
- Policymakers have expressed interest in exploring higher blend levels, including E15 and potentially E25, as part of long-term energy diversification and emissions-reduction efforts.
- Jamaica is assessing local feedstock availability and infrastructure, including production, storage, and blending logistics. However, local production cannot supply ethanol in the short & mid-term.
- Ethanol policy focuses on energy security, fuel diversification, and reducing dependence on imported fossil fuels, while maintaining supply reliability through imports.

Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Ensure Jamaica maintains and enhances ethanol blending within its energy and environmental policies to improve fuel quality and strengthen energy security.	Engagements reaffirmed Jamaica’s commitment to ethanol blending, with E10 firmly established. Discussions emphasized ethanol’s contributions to emissions reduction, fuel diversification, and decreased reliance on fossil fuel imports.	Assess the feasibility of increasing blend levels to E15 and E25 within a defined policy framework.	Support incremental growth in ethanol demand to reinforce Jamaica’s position as a stable, long-term import market. With E15, market potential exceeds 30 million gallons .
	Support government and industry evaluations of higher ethanol blends and system readiness, including fuel quality, infrastructure, and vehicle compatibility.	Technical exchanges referenced studies on feedstock availability and infrastructure capacity, confirming that current supply needs are best met through imports. There is no domestic ethanol production.	Update technical and regulatory assessments to facilitate higher blends and support long-term planning.	Provide technical assurance to policymakers and fuel suppliers to scale blending while maintaining fuel quality and system reliability.
Technical	Ensure fuel suppliers and distributors validate the operational and economic performance of ethanol-blended gasoline products.	Jamaica relies entirely on imported ethanol, sourced 100% from the U.S., with a proven record of system compatibility after more than a decade of E10 use.	Evaluate distribution and storage requirements for higher blends and identify opportunities to optimize logistics.	Facilitate a smooth transition to higher blend levels and ensure a reliable ethanol supply through imports.

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 11.6 billion gallons; -1.8% growth
- Fourth largest gasoline consumption country. Gasoline consumption is declining due to a reduction in population and an increase in more efficient vehicles.
- Imports all its crude petroleum. Most gasoline consumed in the country is produced domestically.

Supply/Demand Basics and Key Market Driver:

- Heavily depends on imports for both fuel and industrial use. Exports from Brazil, Pakistan, and the U.S. have dominated the market.
- Most industrial ethanol shipped to South Korea by large vessels, is re-shipped to each Japanese customer via small vessels.
- The government mandates 500,000 million liters of crude oil equivalent to ethanol (217 million gallons) per year into gasoline, in which ethanol is blended as ETBE. GHG emission reduction target for transport bioethanol at 55% (GOJ considering to raise it to 60%).
- Over 90% of ETBE is produced and imported from the U.S. and is made from U.S. and Brazilian ethanol.
- Total imports from the U.S. were 6.8 million gallons for industrial use (4.7% market share), and 197 million gallons for fuel use imported as ETBE (90% market share).

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

	Fuel Use	Industrial Use
Consumption	217	129
Production	0	0.08
Imports	217*	128
Exports	0	0
Average Blend	1.9%**	NA
Mandate Blend	1.9%	NA

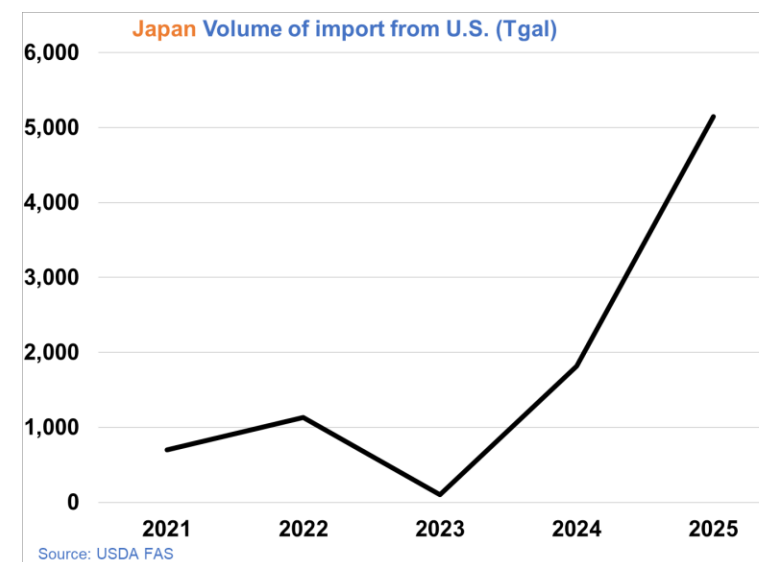
*Included imported ethanol as ETBE **National average blend rate

Trade and Market Share Overview:

- **Import tariff:** Undenatured ethanol (HS220710): 4.5% (2023), 3.6% (2024), 2.7% (2025), 0.9% reduction per year to 0% (2028) under USJTA; Denatured ethanol (HS220720): 27.2%
- Industry meets 217 million gallon ethanol equivalent volume fuel ethanol use
- U.S. import market share has no ceiling, price dependent market with Brazil (Under the new CI reduction requirement of 60%, the max will be 90%). Industrial market demands non-biotech source

Policy Overview:

- Declared carbon-neutral by 2050.
 - Positive but no mention of ethanol.
- Current biofuel policy revised in 2023.
 - Removed ceiling of the U.S. market share for on-road use.
- E3 legally permitted with E10 spec exists only for E10 compatible vehicles.
- Government announced its target for E10 and E20 introduction to begin by 2030 and 2040, respectively, in November 2024.
- Government will begin pilot E10 introduction in Okinawa in 2028.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Ensure higher ethanol direct blending policy through government relations.	Government announcement on E10 and E20 introduction starting by 2030 and 2040, respectively	Ensure E10 and E20 implementation with 2028 regional E10 introduction in Okinawa	Generate 2.4 billion gallons of fuel ethanol demand (E20), not considering shrinking gasoline demand
	Ensure U.S. ethanol use as a SAF and SMF feedstock	Government considers U.S. as a reliable source of ethanol for SAF with reduction of default U.S. corn ethanol CI by CORSIA	Ensure U.S. ethanol access to SAF and SMF feedstock market	General ethanol exports for SAF market at 150 million gallons in 2027 and 340 million gallons in 2030. Expand potential SMF feedstock demand.
Technical	Gain support of a higher ethanol blend policy from the industry and the public.	Fortified the relationships with the relevant industries and automakers to obtain public support on ethanol blending.	Industries use E10/E20 with full public support on its benefits	Generate 2.4 billion gallons of fuel ethanol demand (E20), not considering shrinking gasoline demand
	Build relationship with key industries on uses of ethanol for sustainable aviation fuel and biorefineries	Fostered the relationships with the major refineries and the airline companies on use of ethanol for SAF and fine chemicals	Ensure use of U.S. ethanol for SAF, SMF production and fine chemicals	General ethanol exports for SAF market at 150 million gallons in 2027 and 340 million gallons in 2030 . Expand potential SMF and biochemicals feedstock demand.

Country Overview:

- **Annual Gasoline Consumption/Growth Projection:** 4.3 billion gallons; 2% growth.
- Domestic gasoline refining capacity is now ~4.5 billion gallons per year. However, gasoline production for 2025 is estimated at 2 billion gallons due unplanned refinery shutdowns. Imports still account for 50-55% of supply.
- Malaysia targets carbon neutrality by 2050.
- Government is prioritizing EV for low-carbon mobility with a target of 20% EV penetration by 2030. EV penetration in 2024 was estimated at 2% due to a lack of extensive infrastructure.

Supply/Demand Basics and Key Market Drivers:

- RON 95 gasoline is subsidized with a price ceiling re-introduced in 2018. Other grades available are RON97, RON98 and RON100. As of October 2025, the government has implemented a subsidy quota for RON95.
- MTBE continues to be the main octane enhancer of choice with average of 13% content in gasoline. This stems from Petronas’ petrochemical production in the east coast which is mainly supplied to domestic refineries (including non-Petronas refineries).
- Mid-2025 saw a conversion of an ethanol plant to corn feedstock with a capacity of 2.5 million gallons per year

Current ethanol market in MY2024/2025

(fuel and industrial million gallons)

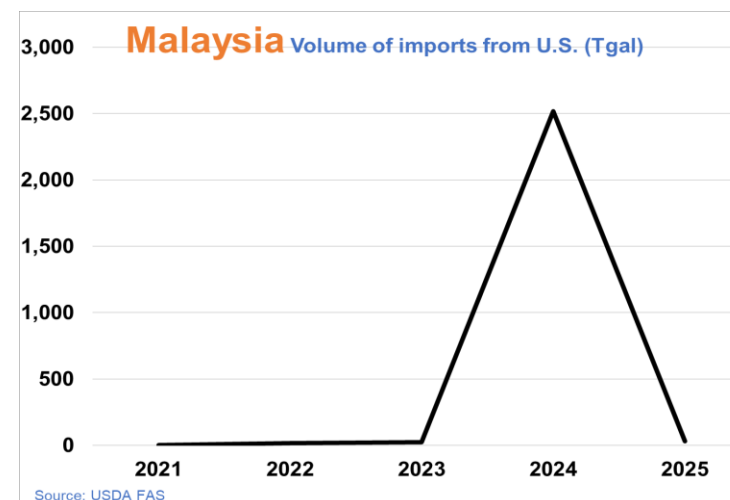
	Fuel Use	Industrial Use
Consumption	-	3
Production	-	0
Imports	-	2.6
Exports	-	0.04
Average Blend	0%	NA
Mandate Blend	0%	NA

Trade and Market Share Overview:

- Oil companies currently do not allow ethanol for gasoline imports – citing a government ban. However, the government regulator does not explicitly state allowance/prohibition of ethanol in gasoline specs.
- Although current volatility in oil prices will likely minimize short-term opportunities, the long-term value of ethanol remains – particularly as a tool to arbitrage octane and as a feedstock for sustainable aviation fuel (SAF).
- The oil & gas industry is increasingly studying the technical and commercial feasibility of using ethanol as an octane arbitrage tool and input for emerging new-use biofuel and biochemical industries.

Policy Overview:

- With the signing of U.S.-Malaysia ART, ethanol import tariff of \$0.90/gallon will be removed. However, excise duty of \$1.10/gallon + 15% still remains and must be discussed with relevant regulators.
- Petronas is tasked to develop Malaysia’s future SAF supply beyond UCO feedstock. To that end, Petronas is conducting feasibility studies on using palm, ethanol, pangomia and jatropa as SAF feedstocks. The government also established an SAF taskforce, which is headed by the Civil Aviation Authority of Malaysia (CAAM). Regulators aim to establish a 1% SAF mandate by 2027 and a 47% blend by 2050. As of January 2026, Malaysian SAF projects totaling 335 million gallons of capacity have been announced.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Remove all tariff and non-tariff barriers on fuel and industrial ethanol imports; work with Petronas to adopt discretionary ethanol blends.	Removal of import duty on U.S. ethanol (previously rated at RM1/liter) with ART. This was a result of engagement and highlighting of this tariff with MITI and MOF.	<p>Engagement with Petco by providing regional policy updates on ethanol imports to encourage gasoline blending. Ongoing policy engagement in partnership with Petco to reduce tariff cost of ethanol blending in order to increase Petco's blending profitability.</p> <p>Engagement with Pengerang Terminal (PT) on technical and commercial capacity building to ensure ethanol market share in biofuel hub expansion. Having ethanol storage at PT would create commercial opportunities for domestic market due to price competitiveness and logistic proximity.</p>	430 million gallons potential market for nationwide E10 implementation.
	Develop potential for ethanol as a blendstock for Malaysian SAF initiatives.	<p>The Council escorted a team of fuel traders and corporate strategists from PETRONAS to Japan for an SAF conference, enabling knowledge transfer and commercial relationship building for ethanol-to-jet opportunities.</p> <p>The Council engaged with the Civil Aviation Authority of Malaysia (CAAM) and the National Aerospace Industry Corporation on SAF road mapping.</p>	<p>Continue to engage Petronas' corporate strategy and sustainability teams to produce studies on the potential role of ethanol in Malaysia's green chemical, octane and SAF mix.</p>	

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** Approximately 800 thousand barrels per day (stable in the coming years, with minor fluctuations due to efficiency gains and gradual transition policies); <3%
- **Mexico's GDP** •GDP growth ~1%; annual inflation ~3.7%; unemployment rate ~2.7%.

Supply/Demand Basics and Key Market Driver:

- **PEMEX and E10 Blending:** PEMEX (2025 fully reinstated state-controlled) offers low-capex path to E10, yielding hundreds of millions USD in annual savings via lower cost/higher octane. Current limit: ~5.8% (NOM-016-CRE-2016); with restrictions in 3 major cities.
- **Energy Self-Sufficiency and Refinery Efficiency:** PEMEX aims for 80% refinery capacity (~70% now), key upgrades in the refineries underway and renewables budget commitment
- **New Oil Production Goals:** Aim for oil production of 1.8 MBPD from 2024 to 2030, signaling a shift towards cleaner, sustainable energy
- **Illegal Substances in Gasoline:** Losses up to ~\$10–30 billion annually from theft/smuggling (huachicol), driving need for regulated alternatives.
- **Sugar Cane Challenges:** Declining productivity from drought/fertilizer issues; 2024/25 production low (~4.7–5 Mt sugar), with partial 2025/26 recovery expected. Ethanol seen as vital alternative revenue.

Current ethanol market in MY23/2024 (fuel and industrial million gallons)

	Fuel Use	Industrial Use
Consumption	61	7.60
Production	4	.6
Imports	0	69.26
Exports	0	0
Average Blend	NA	NA
Mandate Blend	NA	NA

Trade and Market Share Overview:

- **Ethanol Market Potential:** The potential market for ethanol in Mexico ranges from 600 million to 1 billion gallons, depending on regulations and penetration.
- **Domestic Production and Biofuel Promotion:** New laws (Biofuels Law, Hydrocarbons Law amendments – published March/October 2025) align with "Plan México" and Sheinbaum's economic vision. For the first time, hydrocarbons regulations explicitly address ethanol-gasoline blends. PEMEX is committed to participate in the energy transition via renewables.
- **Ethanol Compatibility & Refining:** Government-backed studies on E10 compatibility have advanced, now classified as a "federal project." Detailed analyses by IMP, SENER, and new entities evaluate inclusion percentages, conditions, and investments.

Policy Overview:

- **New Energy Legal framework** emphasizes domestic biofuel production, and establishes permission/ pathway for imports
- **Creation of the National Energy Commission (CNE)** replaces the former CRE in oversight for the regulatory approval (NOM016) to include E10. Presidency advances phased proposals for domestic ethanol production and blending, with **Sustainable Aviation Fuel (SAF)** as a parallel priority described in Plan Mexico.
- **Regulatory update:** In first half of 2026 working group could enable nationwide **E10** (starting point), paving the way for higher blends. No mandates yet, but voluntary blending economics could drive adoption.
- **Outlook for 2026:** Mexico stands at a pivotal moment for ethanol approval once and for all. New legal commitments, refinery upgrades, and rural sector needs create momentum for domestic production and E10 rollout. Progress depends on swift regulatory changes (e.g., NOM-016 update for 2026) and PEMEX/private sector coordination. Challenges like low current blending and import reliance persist, but Brazil MOU + Sheinbaum's support signals positive traction.

Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Modify NOM-016-CRE-2016 to allow E10 nationwide without restrictions.	<p>Engaged CRE/CNE officials by applying for Biomovilidad’s participation in the working group (still not convened)</p> <p>Monitored legislative package enactment (March 18) and regulations (Oct 3).</p> <p>Participated in SENER workshops on transport decarbonization (July).</p> <p>Provided input on biofuels regulatory gaps via Biomovilidad at June forum with ~35 specialists.</p>	<p>Convene working group in Q1 2026 to modify standard; address RVP, urban bans, and refinery tech challenges.</p> <p>Advocate for E10 as superior oxygenate/octane booster.</p>	<p>600 million to 1 billion gallons ethanol market depending on the regulation and ethanol penetration scenarios.</p>
	<p>Engage with Pemex & IMP to persuade them to collaborate with a new study to analyze the potential production of gasoline blended E10 and demonstrate compatibility with the national refining system</p> <p>Promote pilot projects for small-scale production of ethanol in State Governments</p>	<p>Sponsored Pemex reps at Global Ethanol Summit</p> <p>ATM with USGBC leaders advocating ethanol benefits to Pemex, sharing U.S. MTBE-to-ethanol transition expertise.</p> <p>Rebuilt ties with IMP Biomass Directorate for updated E10 study.</p> <p>E85 Pilot Results Presentation in Monterrey with >40 stakeholders; shared 15% emission reductions data.</p> <p>Supported Puebla BUAP’s E10 pilot: secured molasses, utilizing 2,500 gallons ethanol</p> <p>Tamaulipas engagement led to sorghum ethanol promotion in Development Plan; invited to National Ethanol Conference and Global Ethanol Summit which led to support for the gasoline blending program</p>	<p>Follow up the momentum by the federal government, engage with key actors of the project scope, maintain engagement and communication with high ranking officials from Pemex and SENER</p> <p>Continue contributing with the CONADESUCA federal SAF plan and Tamaulipas state government to launch first biorefineries in Mexico</p>	
Technical	<p>Provide technical and supporting evidence about E10 benefits to Government officials.</p> <p>Eliminate the technical myths or misconceptions about E10.</p>	<p>High-level engagements with Undersecretary of Energy sharing data on infrastructure compatibility and benefits.</p> <p>Technical visits to biorefineries in Guatemala and the USA, and high level engagements with Secretary of Agriculture</p> <p>Addressed myths in presentations (e.g., vehicle compatibility, phase separation) at AMPES, IMC, NEC.</p>	<p>Intensify our engagement with federal and state officers and academia who have shown real interest in helping include ethanol in the energy mix.</p> <p>Prepare and distribute arguments against myths and misconceptions about ethanol through effective communication</p>	

Country Overview:

- **Gasoline consumption:** Nigeria consumes approximately **4.6–4.8 billion gallons annually**, with modest growth expected amid higher fuel prices.
- **Fuel supply:** Historically dependent on imports, Nigeria is gradually shifting toward domestic supply as the **Dangote Refinery** ramps up operations, reducing gasoline imports from 2026 onward.
- **Subsidies:** Fuel subsidies—previously costing about **USD 10 billion per year**—have been removed, reinforcing market-based fuel pricing despite higher consumer costs.
- **Blending policy:** An **E10 ethanol blend** remains a policy option to diversify fuel supply, reduce FX exposure, and support long-term fuel market reforms.

Supply/Demand Basics and Key Market Driver:

- Fuel ethanol upside remains large if E10 moves from policy to enforcement. At national scale it could generate ~400 million gallons of fuel-ethanol demand, with most volume expected to be imported in the near term.
- Industrial ethanol remains the core market today, with imports (including U.S. origin) largely serving beverage and pharmaceutical demand rather than transportation blending.
- Nigeria remains Africa’s largest potential fuel ethanol market, but growth depends on policy enforcement, pricing competitiveness, and infrastructure readiness. In the near term, industrial ethanol imports—particularly from the U.S.—will continue to dominate, while fuel ethanol demand represents a significant medium-term opportunity should E10 implementation advance.

Current ethanol market in MY2024/2025

(fuel and industrial million gallons)

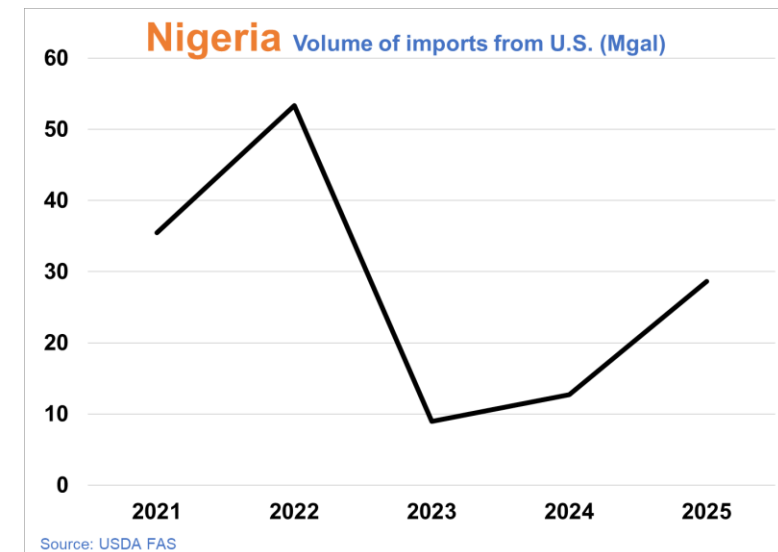
	Fuel Use	Industrial Use
Consumption	-	65
Production	-	0.3
Imports	-	50-55
Average Blend	0%	NA
Mandate Blend	10% (not enforced)	NA

Trade and Market Share Overview:

- **Import tariff:** 0.2% (Import tariff might be levied off for producers).
- **On November 13, 2025, the Nigerian Midstream and Downstream Regulatory Authority (NMDPRA) announced that the 15% import tariff on imported PMS and Diesel will not be implemented.**
- Nigeria remains primarily an industrial ethanol import market, and USGBC engagement continues to focus on rebuilding momentum for a commercially viable E10 pathway and supply-chain readiness.

Policy Overview:

- Nigeria’s E10 blending policy framework remains in place but is not yet fully enforced, with implementation still constrained by infrastructure readiness and policy execution.
- The Petroleum Industry Act (PIA) continues to shape downstream fuel governance and remains the key structural framework for future biofuels implementation.
- The ramp-up of domestic refining capacity—especially the Dangote Refinery—is reshaping fuel supply dynamics and may influence the timing and commercial feasibility of ethanol blending initiatives.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Implement E10 mandate nationwide.	<p>Organized a follow-up ethanol trade mission to Nigeria and attended several strategic sessions, in Lagos and Abuja, notably with senior industry leadership, including MEMAN, DAPPMAN Executives, NNPC Retail Limited, NMDPRA, SON, Cassava Association and Dangote Refinery VP, which secured strategic endorsement for the E10 pilot.</p> <p>Updated and shared the octane economics study to highlight the benefits of E10 blends to the Nigerian industry, including NNPC, NMDPRA and Dangote refinery.</p> <p>The Council has co-designed advocacy content on ethanol and E10 disseminated online via MEMAN's platforms and at physical, hybrid and virtual stakeholder convenings.</p>	Resume allowing imports of ethanol or gasoline preblended with ethanol to meet the E10 mandate.	400 million gallons of potential ethanol exports through either a pre-blended gasoline or direct imports and in-country blending.
Technical	Enhance key stakeholders' understanding of the benefits of ethanol blending to support policy development and implementation.	<p>The Council has continued engaging and developing partnerships with key stakeholders in both the public and private sectors in Nigeria and is analyzing current sentiments through our USGBC ethanol consultants on the ground.</p> <p>Launched MEA's Ethanol Technical Workshop Series and initiated an E10 pilot program to address various technical needs with NMDPRA, NNPC Limited, SON, NADDC and MEMAN, among others.</p> <p>The Council continued its engagement with the Nigerian Stakeholders during the GES and expanded technical information exchange during the post tour in the USA.</p>	<p>Schedule a reverse trade mission to the USA and attend the Biofuel Ethanol training course in NCI, Fargo with the private oil stakeholders and Dangote Refinery to address their technical needs for blending ethanol and supplying the domestic market, as well as re-exporting pre blended gasoline to neighboring countries, SAM and Europe.</p> <p>Address the technical barriers associated with implementing the E10 mandate.</p>	

Country Overview:

- **Annual Gasoline Consumption/Growth Projection:** 350 million gallons; 3% growth
- +1.3 million vehicles, one of the largest fleets in Central America on a per-capita basis.
- Panama is a net importer of gasoline and refined fuels.
- Panama’s position as a logistics and transshipment hub (Panama Canal, ports, free zones) provides operational advantages for fuel and ethanol imports.
- The country has well-developed fuel import terminals, storage tanks, and distribution networks, supporting efficient handling of blended fuels

Supply/Demand Basics and Key Market Driver:

- No domestic ethanol production. Panama has four sugar mills, none of which currently produce fuel ethanol.
- The sugar sector lacks ethanol distillation infrastructure and has limited experience in fuel ethanol production.
- Supplying over 35 million gallons per year under an E10 mandate would require nearly doubling current sugarcane acreage, which is a major practical constraint.
- As a result, ethanol demand will be met primarily through imports, both in the initial phase and likely over the medium term.
- Limited feedstock and land-use competition further constrain near-term domestic production potential.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

	Fuel Use	Industrial Use
Consumption	0	NA
Production	0	NA
Imports	0	0.1
Exports	0	0
Average Blend	0%	NA
Mandate Blend	0%	NA

Trade and Market Share Overview:

- As a member of CAFTA-DR, U.S. ethanol enters Panama duty-free, providing a strong competitive advantage
- U.S. ethanol is well positioned due to competitive pricing, reliable logistics, geographic proximity, and proven experience supplying Panama’s fuel market
- Panama joined Mercosur as an associate member in 2025, potentially expanding trade ties with Brazil, Argentina, Uruguay, and Paraguay
- The ethanol program emphasizes long-term domestic production development, driven by job creation and revitalization of the agricultural sector

Policy Overview:

- Panama implemented an ethanol-blending program in 2013. It demonstrated positive technical outcomes but was suspended due to price volatility and political considerations.
- In 2023, Law 355 (Biofuels Law) was enacted, establishing the legal framework for gradually introducing ethanol blending. Implementation delays pushed the original timeline, so the program is now expected to begin in 2027.
- A new bill will be discussed in the National Assembly in Q1 2026 to enable the formal start of the ethanol blending program.
- The Mulino administration has reaffirmed its commitment to ethanol as part of the national energy and rural development policy.
- Ethanol policy is framed around sustainability, energy security, job creation, and revitalization of the agricultural sector.

Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Demonstrate the benefits of an E10 mandate, with imports playing a critical role in meeting demand during the domestic industry build-out	In 2025, Panama confirmed a nationwide E10 program starting in 2027, with imports playing a key role in ensuring supply while domestic production develops.	Continued support to advance an adjusted bill and draft clear implementing regulations to enable ethanol imports and support blending beginning in 2027.	Enable a potential market of up to approximately 35 million gallons under a nationwide E10 mandate.
	Leverage Panama's strategic location for ethanol opportunities in road transport, maritime fuels, and SAF.	New and strategic contacts were developed across road transport, maritime, and aviation sectors under an integrated biofuels approach.	Ethanol is positioned within Panama's broader energy transition, with potential applications beyond road transport, including maritime fuels and SAF.	Ensure that the government and the citizenships identify the alignment of ethanol use with public policy goals.
Technical	Provide comprehensive technical documentation and support to strengthen the Government's capacity.	Authorities acknowledged the need for robust technical frameworks for fuel standards, logistics, and infrastructure readiness. Ongoing coordination with stakeholders and partners focused on building institutional capacity to support effective implementation and long-term program sustainability.	Ongoing engagement and training for policymakers, focusing on the impacts of ethanol blending and supporting informed decision-making and effective public communication.	Ensure government officials, media, and key stakeholders are well-equipped to advocate for the implementation of an ethanol blend policy.
	Provide clear data and technical evidence to dispel misconceptions surrounding the 2013–2014 ethanol blending program and support informed decision-making.			

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 800 million gallons; 4%
- Peru blends their gasoline with 7.8% ethanol, representing an average consumption of 73 M gal/yr.
- Peru's motor vehicle fleet is expanding, reaching over 12 million registered vehicles in 2025, including a significant number of motorcycles. This growth is driven by economic development and increased urban mobility demand.

Supply/Demand Basics and Key Market Driver:

- Currently gasoline accounts for 22% of the total fuel consumption while LPG accounts for 23%
- In 2025, U.S. ethanol exports to Peru accounted for 62 million gallons (+9% increase in 2024) due to increased light vehicles ownership. U.S. ethanol exports to Peru in MY2024/25 represented \$138 million.
- Peru remains the most stable and consistent ethanol import market for the United States in South America, with U.S. ethanol holding roughly 90% market share under a long-standing 7.8% blending mandate.
- Domestic production is insufficient to meet demand, requiring sustained imports, primarily from the U.S., while exports of locally produced ethanol continue to flow to Europe.
- Under E10, the country will require 80 million gallons.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

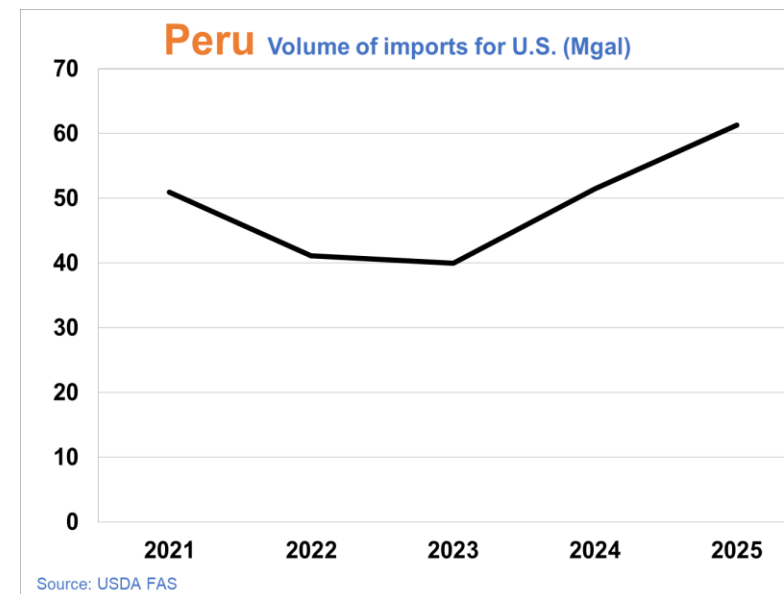
	Fuel Use	Industrial Use
Consumption	73	
Production	66	
Imports	62	
Exports	45	
Average Blend	7.8%	NA
Mandate Blend	7.8%	NA

Trade and Market Share Overview:

- **Import tariff:** duty free for U.S. undenatured and denatured ethanol under the U.S.-Peru Free Trade Agreements (FTA).

Policy Overview:

- Peru has an ethanol blend mandate of 7.8% that was achieved in 2013, since then the expansion of fuel ethanol demand has stalled.
- In 2025, Peru demonstrated interest in expanding ethanol usage and explore opportunities to increase to E10 and E15. However, political instability, fuel prices and currency devaluation prevented Peruvian authorities to adopt higher blends
- Peru enjoys preferential access to the EU and exports domestically produced ethanol to Europe, while meeting the resulting demand-supply gap for the internal market through imports, primarily from the United States.
- Despite limited policy expansion, Peru remains one of the most stable ethanol import markets in the region, offering a consistent outlet for U.S. ethanol under a long-standing mandate and duty-free access.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Increase blend mandate to E10 and/or E15	The USGBC has been able to reach the refineries and the Ministry of Hydrocarbon to highlight the benefits of increasing ethanol blending.	Increase the blend mandate to E10 and above.	Expand the current market for U.S. ethanol in Peru, which represents a potential market of 80 million gallons .
Technical	Change ethanol specifications to reduce technical barriers.	Stringent water content requirements and quality assurance standards have been discussed with the refineries with the support of the Peruvian Society of Hydrocarbons. REPSOL has shown interest in developing an agenda with the national government to raise this issue. Once attending to these technical aspects, the refinery would consider expansion of ethanol use in Peru.	Change current specifications.	Increase U.S. ethanol exports to Peru and improve government refinery economic benefits.

Country Overview:

- **Annual Gasoline Consumption/Growth Projection:** 2.1 billion gallons; 3.5% growth.
- USDA forecasts 2025 fuel ethanol consumption to reach 220 million gallons.
- Imported ethanol does not compete with ethanol produced domestically and instead cost-averages down prices as imported ethanol is 2.5x cheaper. All local ethanol must be consumed before imports are permitted. The U.S. is the chief supplier of foreign ethanol.

Supply/Demand Basics and Key Market Driver:

- 13 ethanol distilleries with a total capacity 135 million gallons are producing around 120 million gallons of fuel ethanol annually. Fuel ethanol Imports are at around 80 million gallons annually with an E10 mandate.
- The Philippines is the fastest growing economy in Southeast Asia, with gasoline consumption expected to steadily increase throughout the 2020s.
- Local producers can only supply roughly 50-55% the required ethanol to meet the E10 mandate, with the balance supplied by imported ethanol.
- Feedstock constraints continue to hinder further domestic ethanol production expansion.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

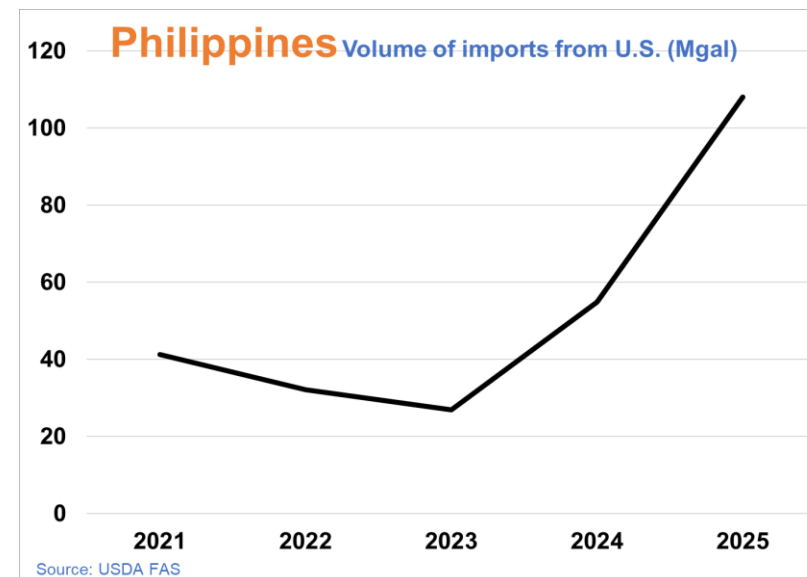
	Fuel Use	Industrial Use
Consumption	200	58
Production	120	7
Imports	80	48
Exports	-	-
Average Blend	9%	NA
Mandate Blend	10%	NA

Trade and Market Share Overview:

- **Tariff rate:** 0% for WTO member countries including the U.S.; duty of 1% is imposed if the ethanol is used for fuel-blending purposes under the Philippines Fuel Ethanol Program.
- Major U.S. ethanol importer. Almost all imported fuel ethanol is from the U.S. Increasingly, this trade flow is shifting to direct export from the U.S., away from transshipment via South Korea.

Policy Overview:

- 10% ethanol blending mandate. Effective and strongly enforced mandate.
- Philippines government targeted E20 by 2020, though this was delayed by the global pandemic.
- Key regulator in May 2024 approved a discretionary E20 policy in addition to the baseline E10 mandate. The first E20 fuels were introduced in Q4 2024.
- Transport accounts for one-third of greenhouse gas (GHG) emissions in the Philippines. The country has passed two laws, the Biofuels Act of 2006 (RA 9367) and the Renewable Energy Act of 2008 (RA 9513) to promote renewable energy, reduce dependence on imported fossil fuels and lower carbon emissions in response to climate change.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Implementation of E15/E20 policy.	<p>The Department of Energy in June 2024 approved the discretionary use of E20 fuel, with the first E20 gasoline station launching in Q4 2024 in Metro Manila. There are currently 3 gasoline stations offering E20, with several more to be launched in 2026.</p> <p>Global Ethanol Summit 2025 - The Philippines delegation to the U.S. comprised of government officials, ethanol producers, ethanol and petroleum associations, gasoline blenders and gasoline retail operators. The delegation came away with increased confidence regarding an expansion of ethanol policy to higher blends.</p> <p>USGBC supported the Philippines' Department of Energy to an ASTM fuel specification workshop in the U.S. to aid the government in the migration of the discretionary E20 policy to an E20 mandate.</p>	Continue to develop key stakeholder relationships and escalate advocacy to the Secretary of Energy to migrate the discretionary E20 policy to an E20 mandate.	290 million gallons potential market for nationwide E20 implementation.
Technical	<p>Assist fuel retailers in introducing E20 fuels.</p> <p>Demonstrate vehicle compatibility with E20 blends for current vehicle fleet.</p>	<p>The Council, Growth Energy and the Renewable Fuels Association (RFA) conducted a Philippines E20 Retail Fuel Workshop in Manila, hosted in partnership with the Philippines Department of Energy (DOE) to roughly 100 fuel retailers, technical advisors, policymakers and downstream fuel industry players.</p> <p>The Council provided fuel retailers with commercial and technical advisory materials in an aim to prepare them logistically, commercially and technically for the retailing of E20 gasoline products.</p>	<p>Execute vehicle compatibility seminars.</p> <p>Promoting educational materials for consumers using the new E20.</p> <p>Design and execute technical workshops for the downstream fuel industry on strategies conducive to the further rollout of E20 gasoline blends.</p>	

Country Overview:

- **Fuel ethanol RFS not implemented, but biodiesel RFS is in effect**
- **Gasoline Consumption/ Growth Projection: 4.06 billion gallons/1.1% (2025)**
- **Oil Refining Industry in South Korea**
 - 43.2 billion gallons of crude oil imported (Middle East 71.5%, US 16.4%)
 - Gasoline production: 7.9 billion gallons
 - Gasoline export: 4.8 billion gallons
- **Number of Registered Vehicles: 26.5 million (2025)**
 - Gasoline Car: 12.4 million (46.8%), Diesel Car: 8.6 million (32.5%), Hybrid 2.5 million (9.4%), EV: 0.9 million (3.4%)

Supply/Demand Basics and Key Market Driver:

- U.S. ethanol is primarily used in industrial applications such as ethyl acetates, hand sanitizer, and windshield washers, etc.
- 113 million gallons of annual ethanol import market, US ethanol accounts for 57.1% (65 million gallons) and Brazilian ethanol accounts for 38.1% (43 million tons), mostly for beverage alcohol.
- Ulsan Port is a transshipment hub for U.S. industrial and fuel ethanol exports, but the volume of transshipment has decreased significantly due to the increase in direct exports.

Current ethanol market in MY 2024/2025 (fuel and industrial million gallons)

	Fuel Use	Industrial Use
Consumption	-	64.6
Production	-	-
Imports	-	89.6
Exports	-	25*
Average Blend	NA	NA
Mandate Blend	NA	NA

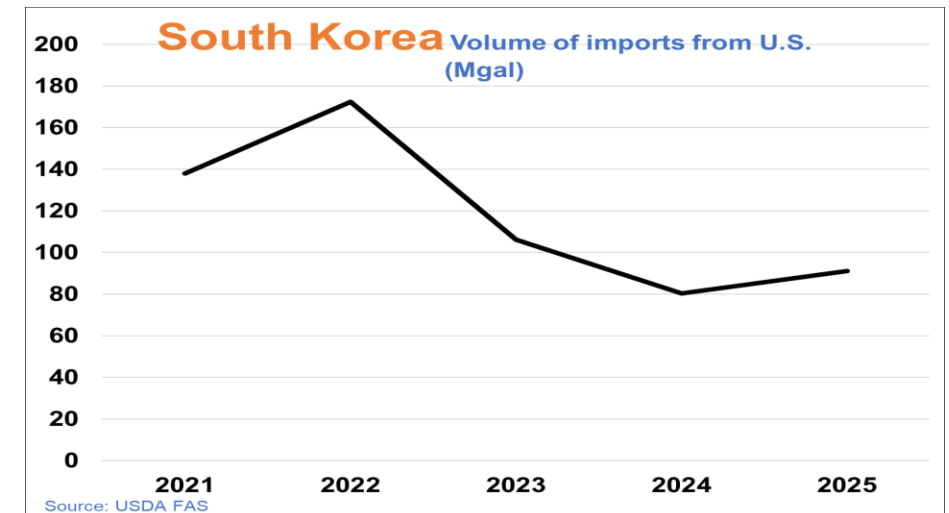
* An estimated quantity exported through transshipment to Southeast Asian countries, excluding the quantity declared for import to Korean customs.

Trade and Market Share Overview:

- **Import tariff:**
 - Zero tariffs for U.S. fuel and industrial ethanol under KORUS FTA
 - Other origins: 8% (fuel and industrial), 10% (alcohol beverage).
- 7th largest import market of U.S. ethanol in MY 2024/2025.
- MTBE and TAME are permitted for use as oxygenates. Ethanol and ETBE are not permitted but are included in the oxygenate category.

Policy Overview:

- Biodiesel: BD 4.0% is applied in 2025 and will be expanded to 8% by 2030
- MOTIE is very negative about introducing a road ethanol policy to protect the oil industry.
- Ethanol was already included in the MOTIE's Renewable Fuel category
 - To implement the RFS: Enforcement decree amendment setting blending ratios and ethanol specifications is required.
- MOTIE and MOLIT are very proactive in introducing SAF RFA.
 - 1% in 2027, 3~5% in 2030 and up to 10% in 2035



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Encourage MOTIE and the oil refinery to recognize the need for the road ethanol RFS as well as ATJ technology for SAF	<p>The Council promoted Japan's bioethanol policy, implemented the ATJ SAF Team program for oil refineries and airlines, and supported participation in the Global Ethanol Summit. These programs provided opportunities for oil refineries and airlines to increase their understanding of ATJ SAF technology and the potential for investment in ATJ. Conversely, the Ministry of Trade, Industry and Energy and the oil industry remain negative about road ethanol.</p> <p>The Council requested the removal of non-tariff barriers to US ethanol exports through US trade negotiation agencies, but there has been no progress. Meanwhile, the Korean government has expressed interest in ATJ SAF and requested ATJ samples for quality evaluation.</p>	Introduce 3.0 Ethanol RFS by 2030	Create over 300 million gallons of U.S. fuel ethanol demand in Korea.
Technical	Develop future demand through SAF (ATJ) technology promotion	<p>The Council conducted two rounds of programs to invite Korean refineries and airlines to the United States. They toured the ethanol and ATJ SAF production value chain and met with ATJ SAF technology companies to highlight the technical and economic feasibility of US ATJ ethanol. These programs helped participants understand the feasibility and economic viability of ATJ SAF technology and contributed to the positive evaluation of ATJ technology by refineries.</p>	Encourage one or more domestic refiners to invest in ATJ technology development	

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 2.43 billion gallons in 2024; -5.7%
- The decline in gasoline consumption is due to factors such as increased penetration of electric vehicles/hybrid vehicles, improved vehicle fuel efficiency, changes in some commuting patterns, and relatively high oil prices.
- Dependent on imported raw materials and fuels.

Supply/Demand Basics and Key Market Driver:

- Ethanol imports equaled 13.50 million gallons in 2025, a 7% increase YoY.
- U.S. ethanol imports were 264 thousand gallons in 2025, with a 2% market share.
- CPC Taiwan maintained the program of 14 E3 trial stations with an annual ethanol consumption of 20K gallons only.
- The main uses of imported ethanol are industrial applications, with other uses including medical, pharmaceutical, testing, energy, and some winemaking applications.
- Local non-food ethanol production (referring to as the dry milling fermentation process) is limited due to the high cost with low yield.

Current ethanol market in MY2023/2024 (fuel and industrial million gallons)

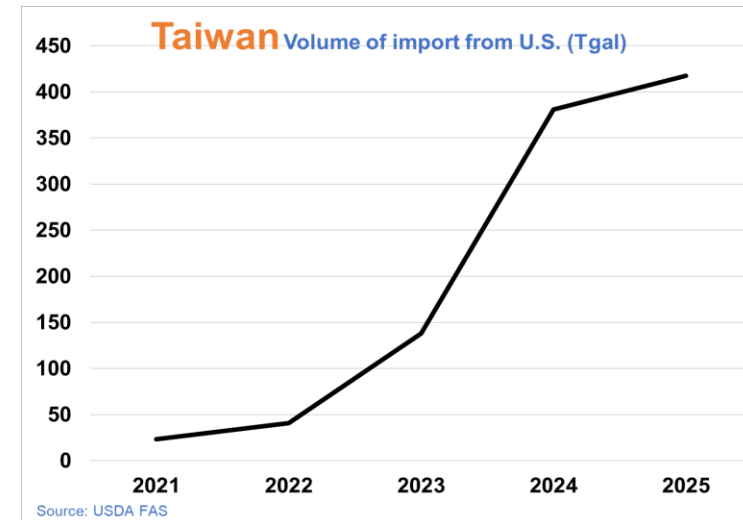
	Fuel Use	Industrial Use
Consumption	0.02	13.5
Production	0	
Imports	0.02	13.5
Exports	0	
Average Blend	3% (14 Trial stations)	NA
Mandate Blend	NA	NA

Trade and Market Share Overview:

- **Import tariff:** 3% for chemical synthetic reaction use under the government's pre-approval. 2024 annual import volume was 0.388 million gallons.
- 20% for other undenatured ethyl alcohol exceeding 90% vol. 2024 annual import volume was 13.114 million gallons.
- Only containerized/iso-tank U.S. ethanol can be shipped to Taiwan, but the long voyage and high freight makes it less competitive.

Policy Overview:

- The government allows the use of MTBE as an oxygenate and local MTBE producers are affiliated companies of oil refineries.
- The revised CNS 15109 (fuel ethanol) and CNS 12614 (E10 gasoline) are expected to be published by the end of June 2026
- Ministry of Transportation and Communications (MOTC) plans to have a pilot SAF supply in 2025 and begin SAF production in 2026. Taoyuan International Airport supplies an average of 3 million kiloliters of aviation fuel annually. The National Science and Technology Council (NSTC) estimates that by 2030, Taiwan's SAF demand will reach around 240,000 tons.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Communicate with MOTC / MOEA / MOENV to advance E10 pilot program and extend E3 subsidies.	<p>E10 recognized as a practical near-term CO₂ reduction tool.</p> <p>CNS fuel standards revisions initiated (15109 / 12614).</p> <p>CPC MOU enabled structured coordination on imports, blending and pilot stations.</p> <p>Inter-agency discussions now routine (Net-Zero Forum / Ethanol Committee)</p>	<p>Finalize CNS standards + customs guidance.</p> <p>Launch E10 pilot upgrade from E3.</p> <p>Establish support measures (subsidy / price stabilization / data validation)</p>	<p>Clear regulatory pathway for ethanol gasoline.</p> <p>Enable scalable deployment of E10.</p> <p>Full E10 = ~220–240M gallons/yr ethanol demand potential</p>
	Incorporate ATJ into Taiwan's long-term SAF strategy and address HEFA feedstock limits.	<p>ATJ positioned as scalable complement to HEFA.</p> <p>TSAF platform operational for multi-stakeholder coordination.</p> <p>ATJ discussed within CORSIA + 2030/2050 decarbonization context.</p> <p>Initial dialogues with U.S. ATJ developers + Taiwan airlines/fuel suppliers.</p>	<p>Formal recognition of ATJ in SAF policy design.</p> <p>Facilitate offtake scenarios for ATJ imports or hybrid supply.</p> <p>Support CI-based, technology-neutral incentives.</p>	<p>SAF not constrained by waste-oil feedstock.</p> <p>Creates long-term pull for U.S. ethanol → ATJ</p> <p>Strengthens U.S.–Taiwan clean energy & supply-chain cooperation.</p>
Technical	Assess compatibility of domestic vehicles with E10 and support government on blending infrastructure and formulations.	<p>Yamaha demonstration improved two-wheel compatibility confidence.</p> <p>CPC R&M engaged on logistics/materials issues.</p> <p>Local experts reviewing international E10 test data for Taiwan fleet.</p>	<p>Address remaining fleet perception & data gaps.</p> <p>Support selected fleet demonstrations.</p> <p>Provide data for fuel standard & infrastructure decisions.</p>	<p>Public/industry acceptance for E10.</p> <p>Data-based policy decisions.</p> <p>Enhances energy diversification via low-carbon imports.</p>
	Evaluate feasibility of adopting ATJ technology in Taiwan.	<p>SAF summits imported global learnings.</p> <p>TSAF dialogues clarified ATJ process/logistics.</p> <p>Initial mapping of siting and supply scenarios.</p>	<p>Conduct feasibility on supply, location, and economics.</p> <p>Assess infrastructure readiness and upgrade needs.</p> <p>Support CI-based policy tools for early adoption.</p>	<p>Enables technology-neutral SAF mix.</p> <p>Strengthens energy/security rationale for biofuels.</p> <p>Positions U.S. grains/bio-products as key enablers of Taiwan's transition.</p>

Country Overview:

- **Annual Gasoline Consumption/ Growth Projection:** 4.5 billion gallons
- Current regulations allow E5.5 to count as E10 to allow fuel suppliers flexibility to manage supply and demand issues while ensuring new fuel labeling is consistent
- E10 is mandated for the Premium (regular) grade of RON 95 (representing 95 percent of demand) while E5 is still available in the Super grade of RON 97 (with a 5 percent market share).
- The increased utilization of bioethanol (and other renewable fuels) is mandated by the Renewable Transport Fuel Obligation (RTFO), which requires that a certain percentage of road transport fuel supplied meets minimum GHG criteria.

Supply/Demand Basics and Key Market Driver:

- In MY 2024/25, US exports to the UK totaled 214 million gallons, making UK the fourth largest ethanol export market, valued at \$468 million.
- In the United Kingdom, bioethanol production capacity has been affected to the recent shuttering of plants. Previously, capacity had been estimated at 272 million gallons, with three plants operating (2 wheat and 1 sugar beet).

Current ethanol market in MY2024/2025

(fuel and industrial million gallons)

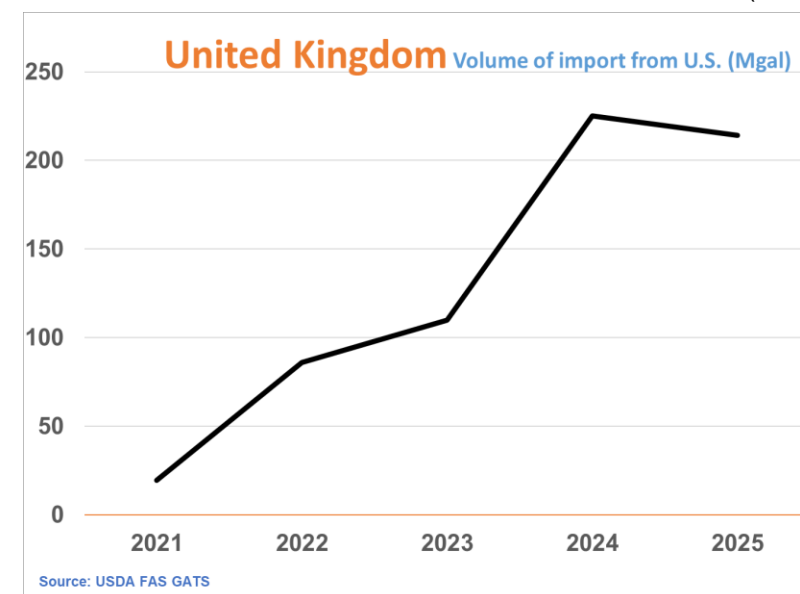
	Fuel Use	Industrial Use
Consumption	392	N/A
Production	39	N/A
Imports	353	N/A
Exports	N/A	N/A
Average Blend	~8%	N/A
Mandate Blend	10% (for Regular grade of RON 95) 5% (for Super grade of RON 97)	N/A

Trade and Market Share Overview:

- **Import tariff:** the previous tariff rates [£0.160/liter (Undenatured ethanol), £0.085/liter (Denatured ethanol)] are no longer being applied under the duty-free tariff-rate quota (TRQ) of 1.4 billion liters (≈370MG) for U.S. ethanol under the Economic Prosperity Deal (EPD) of 2025.

Policy Overview:

- In September 2021, the UK implemented a national E10 blend mandate.
- In July 2022, the RTFO was updated to require further GHG emission reductions, supporting the rollout of the E10 mandate, with requirements coming into force on January 1, 2023.
- In November 2022, E10 was introduced as standard grade in Northern Ireland.
- In January 2025, the UK's SAF mandate entered into force, beginning at a modest 2% of total UK jet fuel demand but ramping up on a linear basis to 10% in 2030, before reaching 22% in 2040 and remaining there until there is greater certainty regarding SAF supply.
- In 2026, the crop-based biofuels cap is at 3% and will continue to decrease annually before reaching 2% in 2032 and remaining there.
- By 2035, all new cars and vans will need to be 100% zero emission ("ICE ban").



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Increase imports of U.S. ethanol to meet the 10% blend mandate	<p>Continued to engage with UK stakeholders to monitor and support continued E10 rollout in the UK and Northern Ireland.</p> <p>Following the EPD announcement in May 2025, the USGBC led a mission to London to meet with UK stakeholders and industry. A TRUMP Mission was carried out in September 2025, followed by additional USDA engagement. Similarly, UK stakeholders attended the 2025 Global Ethanol Summit in Washington, DC and two individuals travelled to Indiana for the post-tour trade team.</p> <p>Ethanol blending rates continue to climb upward, starting from an average blend rate of 4.7% in 2021.</p>	<p>Feedstock eligibility for 1G U.S. ethanol for SAF production to meet the UK's SAF mandate.</p> <p>Eliminate the current crop-based biofuels cap.</p> <p>Allow for higher blends (i.e., above E10) in on-road.</p> <p>Removal of the ICE ban.</p> <p>Ensure a viable role for 1G U.S. ethanol in the creation of domestic fuel regulations for maritime fuels.</p>	Reach 370 million gallons of U.S. ethanol exports into United Kingdom and Ireland.
	Ensure free market access for U.S. ethanol	<p>The Council has continued its engagements with the British government and energy sector and escalated its engagement with industry groups there.</p>	<p>Implement harmonized ethanol standards between the U.S. and the UK markets.</p> <p>Recognition of U.S.-based CCS/CCUS for U.S. ethanol exports to the UK.</p>	

Country Overview:

- **Annual Gasoline Consumption/Growth Projection:** 3 billion gallons; 5% growth
- Vietnam has emerged as an important oil and natural gas producer in Southeast Asia.
- The country's rapid economic growth, industrialization, and export market expansion have drastically increased domestic energy consumption over the past decade.
- Vietnam's gasoline consumption grew steadily at approximately 3-4% per annum, pre-pandemic, with higher growth expected over the next 10 years.

Supply/Demand Basics and Key Market Driver:

- Two domestic ethanol refineries have a capacity of 63 million gallons of fuel ethanol but operate at about 60% capacity. A third domestic refinery produces only food grade ethanol, with a nameplate capacity of 17 million gallons, also operating at 50% capacity.
- Around 40% of domestic production is used for fuel blending.
- Imports are around 18.5 million gallons.
- Consumption of E5 RON92 Gasoline has decreased annually against total gasoline consumption, falling from 43.5% in 2018 to 15% in 2024).
- Growing incomes coupled with a lack of consumer understanding of the performance benefits of ethanol-blended gasoline are negatively impacting sales of E5 RON92.

Current ethanol market in MY2024/2025 (fuel and industrial million gallons)

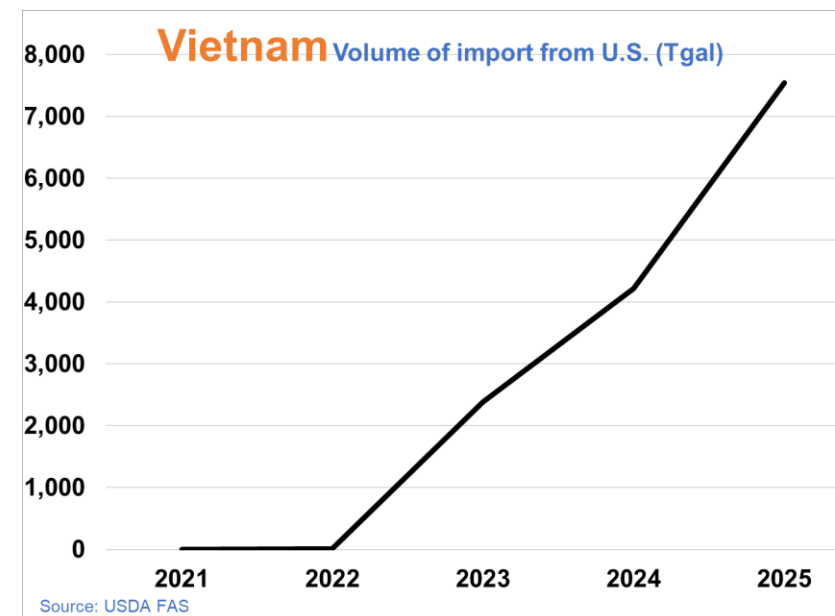
	Fuel Use	Industrial Use
Consumption	31.5	10
Production	13	23
Imports	18.5	-
Exports	-	13
Average Blend	1.5%	-
Mandate Blend	2.5% (E5 RON92 grade)	-

Trade and Market Share Overview:

- **Tariff rate: 5% (down from 10%, 15% and 20% in 2023, 2022 and 2020, respectively)**
- Countries with FTA access to Vietnam (ASEAN, India, Australia, New Zealand, South Korea, Japan, China, Chile) face 0% tariff.
- U.S. is the major ethanol supplier to Vietnam. Flows are increasingly being exported directly, shifting away from a transshipment model via South Korea.

Policy Overview:

- Vietnam in 2018 implemented an E5 mandate for RON92 gasoline.
- **Policy change expands to E10 on the RON95 in June 2026, while maintaining E5 on RON92 till 2030.**
- Vietnam has increased its commitments to GHG reductions, now targeting a 43.5% emissions-reduction target by 2030 and net zero by 2050. Policy roadmaps submitted and approved 2022 by multiple ministries identify an E5 mandate across all grades of gasoline as an immediate priority for road transport.



Targeted Goals and Expected Progress

Goals	Target	2025 Program Results	Future Goal	Potential Impact
Policy	Further reduce the 5% import tariff on U.S. ethanol.	<p>Coordinated with FAS Vietnam and the Vietnamese fuel industry to advocate to the Ministry of Finance for a further reduction of the tariff on imported U.S. ethanol. Messaging centered on creating a level playing field with petroleum-based octane products, economic value creation and environmental savings which would help underpin Vietnam’s stated policy goals pertaining to trade, economic development and the green energy transition.</p> <p>Vietnam has reduced its ethanol import tariffs, lowering the Most-Favored-Nation (MFN) rate from 10% to 5% effective March 31, 2025 (Decree 73/2025/ND-CP), following a previous cut from 15% to 10% in July 2023. This policy movement aims to boost imports, support biofuel use (E10), and improve trade balances with partners like the U.S..</p>	Further engagement with the Ministry of Finance, as well as other Ministries supportive of fuel ethanol, during the H1 2026 tariff review period to request further reduction of the import tariff to below 5%.	240 million gallons potential market for nationwide E10 RON 95 implementation
	Advocate expansion of E10 to entire gasoline pool.	<p>U.S. ethanol industry leaders from USGBC, Growth Energy and the Renewable Fuels Association (RFA) signed a quadripartite Memorandum of Understanding (MOU) with Petrolimex in March 2025, recognizing the economic, environmental, human health and energy security benefits of increasing the use of fuel ethanol in transportation fuel mixes.</p> <p>Vietnam mandated the sale of E10 gasoline from June 2026 under Decision No,46/2025/QD-TTg, signed on December 11, 2025 after the Ministry of Industry & Trade issued Circular 50/2025/ TT-BCT in November which outlines a revised roadmap for biofuels application. All RON95 gasoline sold nationwide must be converted to E10 while existing E5 RON92 will continue to be sold until the end of 2030. 42 fuel stations in Hanoi, Ho Chi Minh City and Hai Phong began selling E10 RON95 as trial by Petrolimex and PV Oil from August 2025, and additional stations began transitioning to E10 RON95 in January 2026.</p> <p>The Council organized an E10 technical and policy study mission to the Philippines for Vietnam’s national oil company, Petrolimex, in November 2025.</p>	<p>Continue to widen and strengthen our government coalition supportive of expansion of fuel ethanol, assuming a thought leadership role with Ministry of Industry & Trade and the Ministry of Construction.</p> <p>Extend technical and expertise support to petroleum companies to ensure smooth transition to E10 RON95 offerings in the country.</p>	