

Iowa Renewable Fuels Summit

February 4, 2025



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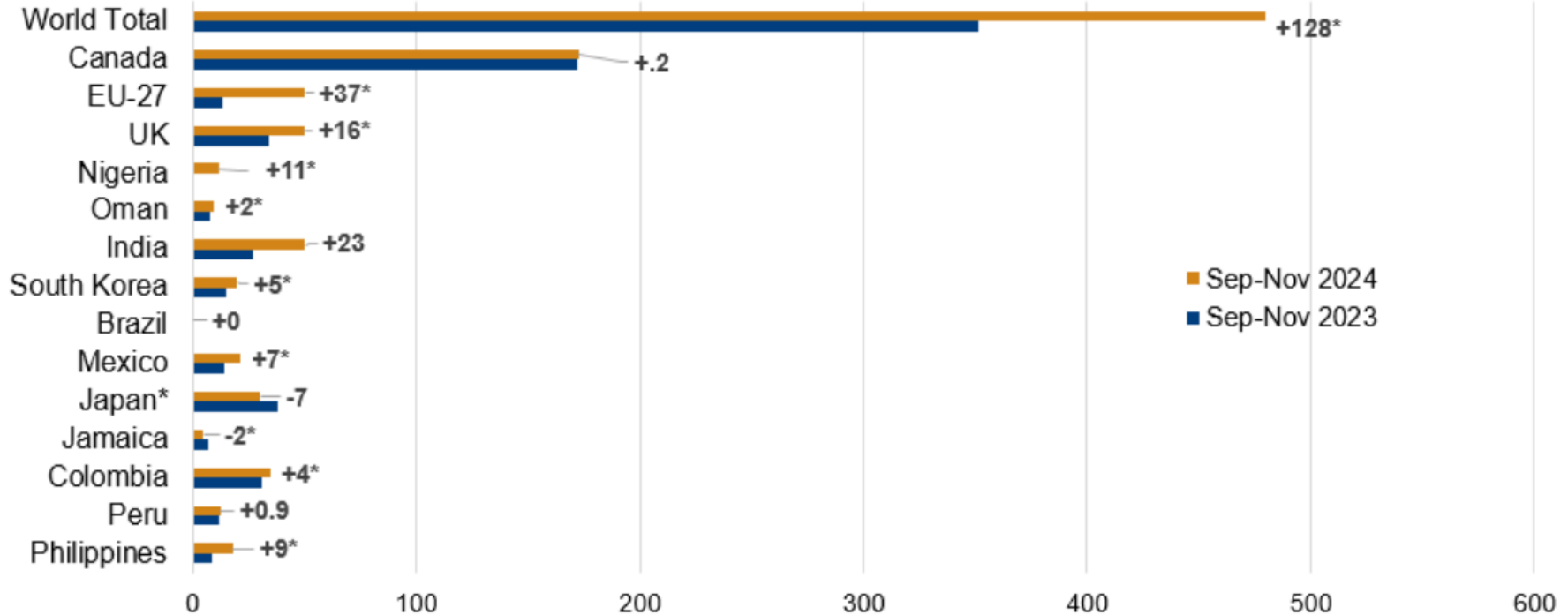
A global network of professionals building worldwide demand and developing markets for U.S. grains and ethanol.



U.S. Ethanol Exports MY 23/24

First 3 months MY 24/25: >479 million gallons – up 36.6% from last MY

EU, UK, India, Colombia drive increase; sharp growth trends from Nigeria and Philippines



Source: USDA Global Agricultural Trade System & *USGC estimates for Japan

*Million gallons

Priority Markets 2024/2025



Primary markets

- Canada
- EU/UK
- Japan
- SEA-Indonesia, Vietnam, Philippines
- Nigeria



Secondary markets

- Mexico
- Colombia
- Central America
- Peru
- Ecuador
- India
- South Korea

New Uses for Ethanol

Potential USGC engagement in non-road applications

BioBased Chemicals

- Green-Based premium
- Cost competitive to petroleum based products
- Wide variety of chemical applications
- Corporate ESG goals

Sustainable Aviation Fuel

- Immense market potential
- HEFA versus ATJ
- Scoring concerns and ability to qualify

Marine Fuel

- Limited research using ethanol as feedstock
- Lack of policy support or policy restrictions
- Desperation for alternatives
- No clear winner as of yet

Clean Cooking Stoves

- Market size unknown
- Standards creation
- Policy parity
- Strong global support and momentum

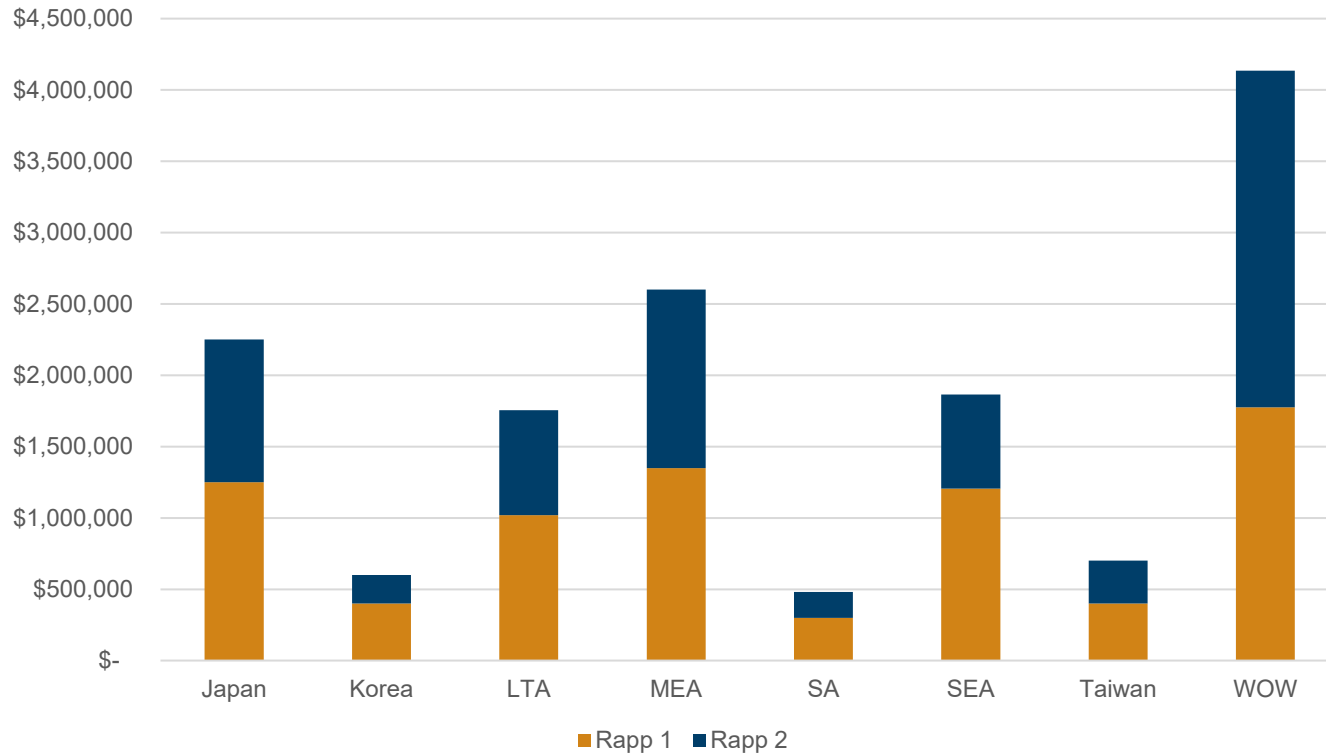
Heavy Duty Diesel Transition

- Hard to electrify sectors
- Economics between diesel and ethanol are attractive
- Ease of cost transition for fleets

Ethanol Electric Gen Sets

- Proof of concept sound
- Pricing unknown
- Lack of knowledge or pursuit of alternatives

RAPP Allocations for Ethanol



Asia and South Asia Engagement



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Asia Activities



- Taiwan MOU with CPC
 - E10 Pilot Initiatives/ATJ SAF Promotion
 - E100 Test Ride
- Korea Low Carbon Fuels Symposium
 - Renewable Fuel Standard to include ethanol implementation
 - U.S. ample ethanol feedstocks for SAF goals
- Philippines Blend Rates
 - E20 discretionary blend approved in 2024
 - Seeking an E20 mandate
- Japan Events and Policy Movement
 - First SAF and Biofuels Summit w/180 attendees
 - E10 by 2030 and E20 by 2040

Executive Mission to Indonesia & Vietnam

- Executive Delegation from USGC
 - RFA and Growth Energy engaged with government officials and private sector leaders
 - Collaboratively supporting ethanol policy development efforts
- Indonesia is advancing plans
 - E5 by 2025 and E10 by 2030
 - 10 billion gallon gasoline market
- Vietnam is exploring opportunities
 - Expand its E5 mandate for RON92 (88 AKI) grade gasoline
 - 3 billion gallon gasoline market



India Clean Cooking Initiative

- Pilot program in 3 districts of Uttar Pradesh
 - 500 households in each
 - 6 months for testing 3 different business models
- Working with local stakeholders to deliver
- Multiple economic, health, and environmental benefits
 - Job creation
 - Competitive with LPG
 - Reduction in toxic pollution
- 5% adoption = 211 million gallons annually



MEA Initiatives



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Nigeria E10 Pilot and Status

OBJECTIVES AND ASSOCIATED ACTIVITIES

- Conduct activities in the key areas necessary for successful E10 deployment
 - Regulatory framework, operational guidelines, technical feasibility
 - Economic and financial analysis, supply chain logistics
 - Communication and Stakeholder engagement, monitoring and evaluation

INVOLVED PARTIES

- **NMDPRA** (Nigeria Midstream and Downstream Petroleum Authority)
- **NNPC** (Nigerian National Petroleum Corporation)
- **SON** (Standards of Nigeria) and local regulatory bodies
- **MEMAN** (Major Energy Marketers Association of Nigeria) other marketer groups, auto and energy industries
- **US Grains Council** - technical advisory role



Nigeria E10 Pilot and Status

2024/2025 ACTIVITIES

- Technical workstreams have been formed
- USGC technical support for E10 implementation
 - E10 technical workshop for MEMAN – September 24
 - Nigeria mission and panel at Oil and Trading Logistics Conference – October 24
 - Ethanol supply for pilot committed by USGC member ADM
- Engagement activities planned for 2025
 - Ethanol workshop in January for DAPPMAN (Depot and Petroleum Products Marketers Association of Nigeria)
 - Fuel and food workshop in January
 - Address use of cassava for E10
 - Site tours of Netherlands terminals for Dangote Refinery (1Q)
- NNPC conducted gap analysis
 - Retail locations/infrastructure compatibility
 - Feedback provided from USGC; waiting on NNPC
 - **Startup planned in Q1 2025**

LTA Activities



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Central America

E10 Wave Continues

- Costa Rica has 2 terminals ready to blend E10 with rollout to RON95 and RON91
 - Country-wide E10 by 2026
- Guatemala
 - E10 implementation by 1/1/2026
- E10 in Central American Triangle would create market demand of 130 million gallons annually (El Salvador, Guatemala, Honduras)



Latin America Opportunities

- Colombia
 - Looking to maintain E10, and over 80% market share; work toward E14
 - 190 million gallons of export potential with E14
 - Recently released a SAF roadmap from their civil aviation agency, Aerocivil
- Peru
 - Currently blending at 7.8% blend
 - 72-million-gallon demand with E10
- Mexico
 - New administration leaning toward cleaner fuels; ethanol and biofuels prioritized for transport
 - E10 policy proposal has been submitted to the government
 - Successful E85 pilot project with Nuevo Leon State Government
 - Potential market of 600 million – 1 billion gallons annually

Canada Ethanol Exports and Policy

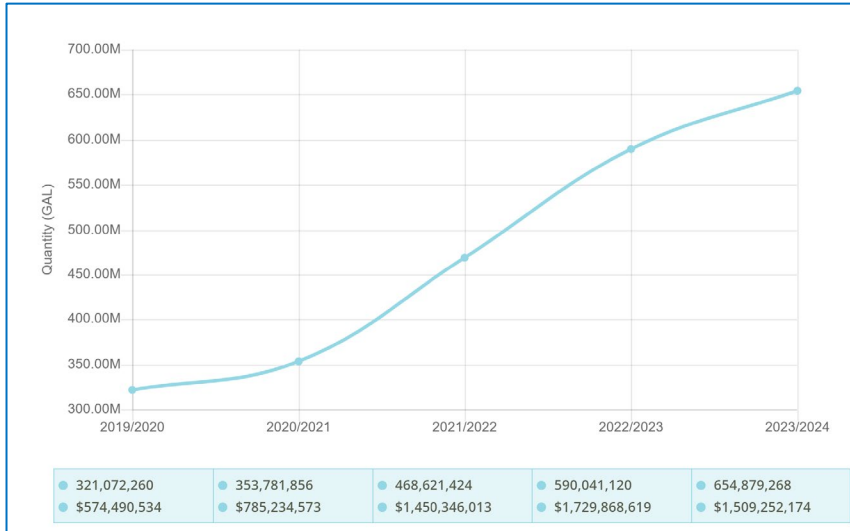



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Record year for US Ethanol Exports to Canada

655 million gallons to Canada MY 23/24

Strong start to MY 2024/25 with volumes up (year-on-year)



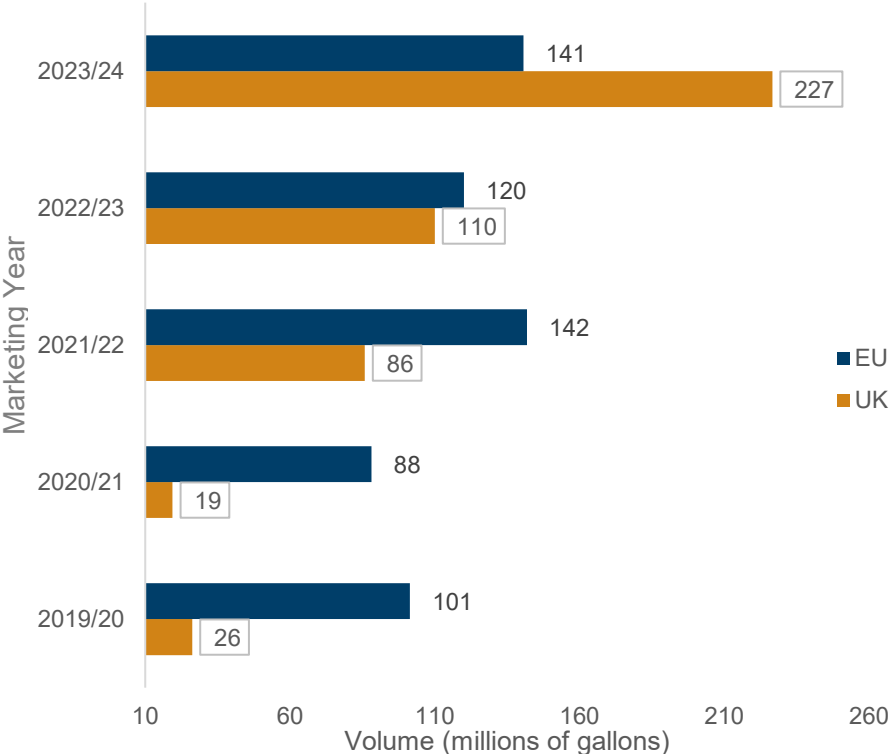
	PREVIOUS MARKET YEAR (SEP-NOVEMBER 2023)	CURRENT MARKET YEAR (SEP-NOVEMBER 2024)
World Total	351,140,585 \$940,556,797	479,561,643 ↑ 36.6% \$1,087,421,475
 Canada	172,459,647 \$448,576,461	172,740,321 ↑ 0.2% \$381,536,990

EU & UK Overview

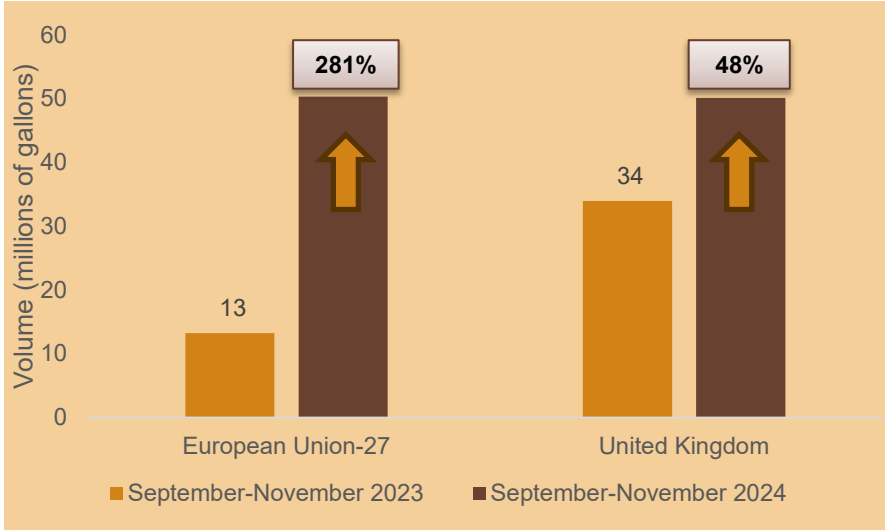


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Steady Ethanol Demand in EU/UK

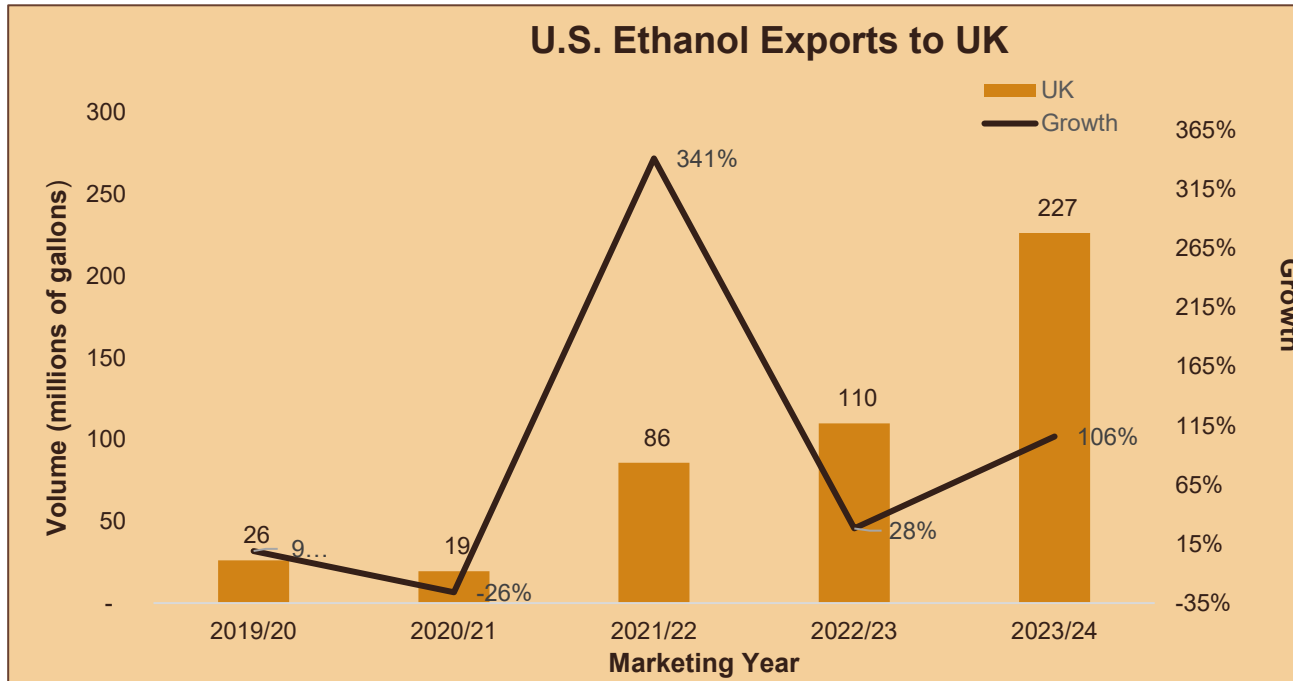


U.S. Ethanol Exports to EU & UK MY 2023/2024 (y/y)



Record year for ethanol exports to the UK

227 million gallons in MY 23/24



July 2021

- UK Department for Transport (DfT) published its transport decarbonization plan.

September 2021

- Introduction of E10 mandate.

November 2022

- E10 implementation in Northern Ireland.

January 2025

- SAF mandate enters into force.

The increased utilization of ethanol (and other renewable fuels) is mandated by the Renewable Transport Fuel Obligation (RTFO).

Global Engagement



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USGC Multilateral Engagement



USGC engages and monitors multilateral institutions that

- influence ethanol regulatory policy and market conditions
- include ministers of agricultural, energy, environment, transport, and trade

Examples of multilateral institutions | # of member countries

- Inter American Institute for Cooperation on Agriculture | **34** Country Members
- International Energy Agency | **45** Country Members
- United Nations Framework Convention on Climate Change | **193** Country Members
- International Transport Forum | **69** Country Members
- World Trade Organization | **166** Member Countries



Why Monitor and Engage Multilaterals

Multilateral institutions shape biofuel policies in export markets by:

Hosting biofuel forums of ministers

Conducting biofuel work programs

Drafting biofuel publications

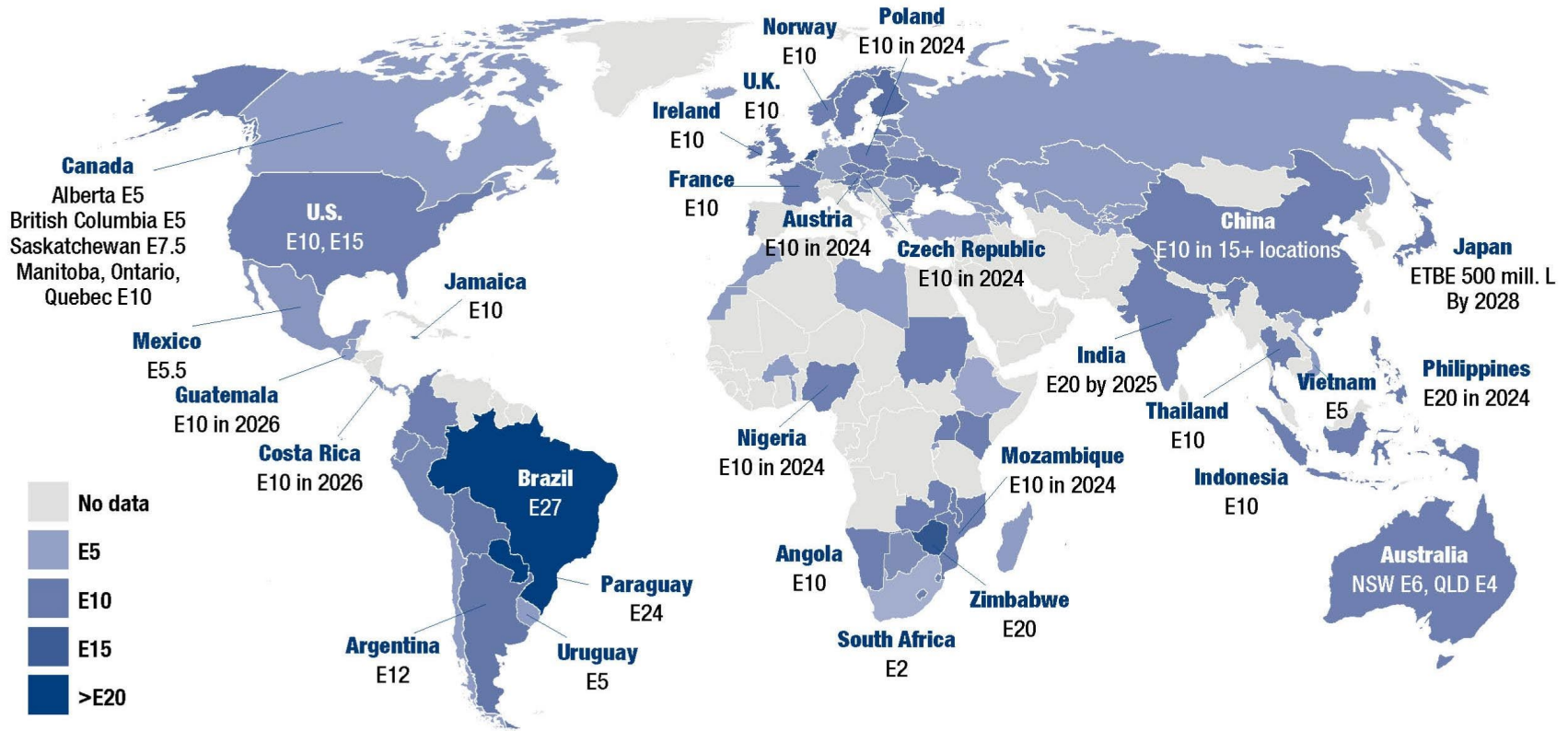
Issuing biofuel statements

Writing rules that influence markets

Multilateral institutions influence trade and demand for ethanol



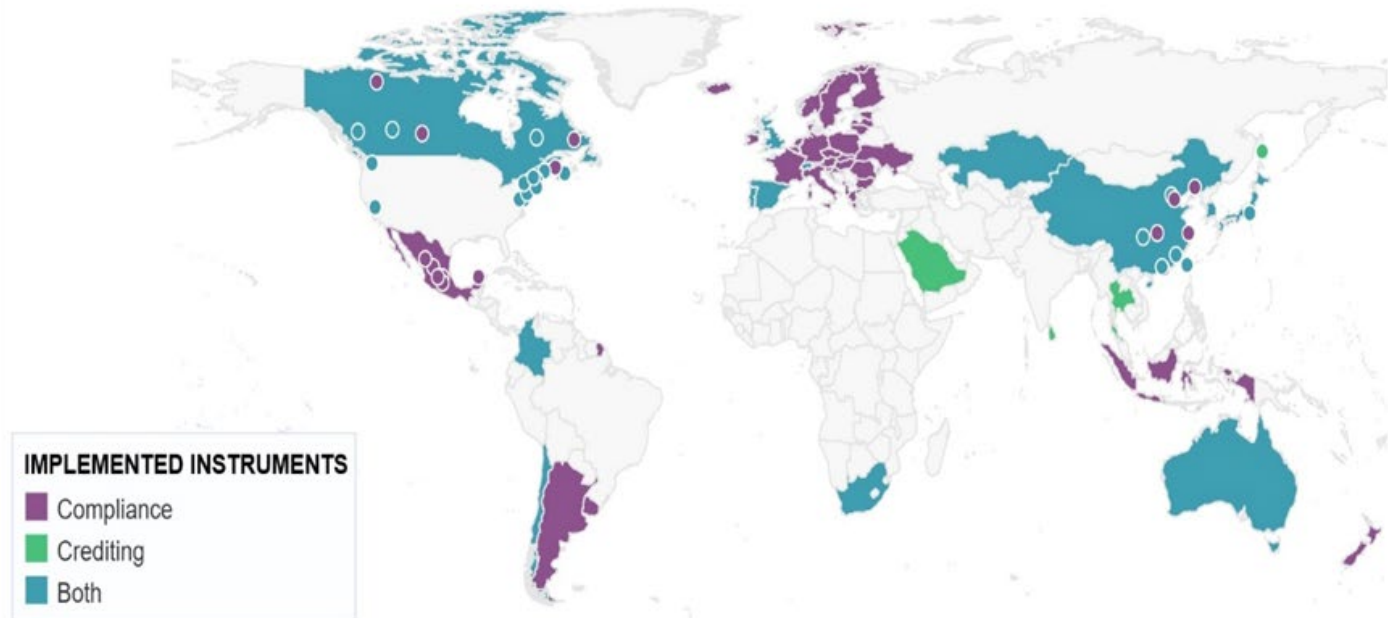
Overarching objective of multilateral engagement is to increase blending %



Provides a means to monitor rapidly emerging carbon taxes, carbon border adjustment mechanisms, and emissions trading systems that are financing the energy transition

Carbon pricing instruments around the world, 2024

Map shows jurisdictions that have implemented Direct Carbon Pricing Instruments - Compliance instruments (Emissions Trading Systems (ETS) and Carbon taxes) and/or domestic carbon crediting mechanisms, subject to any filters applied. The year can be adjusted using the slider below the map.





Global Ethanol Summit

October 19-22, 2025

**Capitol Hilton,
Washington, DC**

THANK YOU!