



Southeast Asia: A Glimpse Into The Region's Vibrant Ethanol Programs

Table of Contents

- 1. SEA & Oceania Market Potential*
- 2. Market Development Efforts To-Date*
- 3. Current Market Situation & ETOH Advantage*
- 4. Looking Forward*

1. SEA & Oceania Market Potential

Ethanol is increasingly capturing the interest of buyers and policymakers across Southeast Asia and Oceania amid growing environmental awareness. There are very real barriers in Southeast Asia including but not limited to high tariffs compared to aromatics, however the U.S. Grains Council sees Indonesia, Vietnam, the Philippines and Malaysia as opportunity markets where focused development programs can help unlock value for expanding global ethanol use.

Indonesia, an archipelagic country of 275 million people, is Southeast Asia's largest economy and already consumes close to 10 billion gallons of gasoline per year. Indonesia's gasoline consumption looks primed to surpass 11 billion gallons annually by 2025 on the back of the global economic recovery.

Malaysia's gasoline consumption prior to the pandemic was growing at three percent per year, and total consumption is forecasted to surpass 5 billion gallons per year by 2024. Despite being a mature gasoline market in Southeast Asia, use and knowledge of fuel ethanol is limited, providing an opportunity for the Council to offer information on and assistance with the commercial and environmental benefits of transitioning to using ethanol.

Vietnam is yet another case of immense potential for expanded ethanol use. At present, Southeast Asia's fastest growing economy consumes close to 3 billion gallons of gasoline annually, with demand expected to grow 16 percent over the next five years. Vietnam's consumption will grow and will carry with it a need to reduce fuel costs for its growing middle class and meet commitments to emissions reduction.

The Philippines, Southeast Asia's second-largest country by population, consumes over 1.5 billion gallons of gasoline per year. Notwithstanding a higher use of fuel ethanol to date relative to other key markets in the region, there is still space to expand usage in the country through environmentally conscious policy and significant interest in building an import-cohabitive, local ethanol industry.

"Vietnam has proven itself as a willing and able trade partner. We maintain a high



level of cooperation on multiple levels to achieve mutually beneficial trade and environmental goals,” said Kent Yeo, USGC Regional Ethanol Consultant.

2. Market Development Efforts To-Date

The Council’s market development efforts in the region’s most promising fuel-ethanol markets are already beginning to pay off, positioning expanded ethanol use across Southeast Asia.

In 2019, the Council successfully helped remove a long-time ban on ethanol content outlined in Indonesia’s largest national oil company’s import specifications. The organization engaged the Ministry of Energy and Mineral Resources (ESDM) and the national oil company to showcase technical evidence of ethanol’s use in meeting fuel specifications. The ban was lifted in 2019, albeit with a three percent limit imposed for ethanol content. The Council’s priority in Indonesia is to increase this blend rate to nearly 10 percent in addition to advocating for a pilot program in the East Java region.

The Council is aiding in the development of a national vehicle study in the Philippines measuring the compatibility of E10, E15 and E20 fuels with the country’s current vehicle fleet. The vehicle study, coupled with a new national fuel standard in development, should set the scene for greater fuel ethanol usage across the market.

The Council in recent years has worked to reduce tariffs for fuel ethanol in Vietnam. In 2020, the tariff rate was dropped by five percentage points from 20 percent down to 15 percent. The Council is now working towards lowering these tariffs further. Moreover, the Council in 2020 strengthened its relationship with key regulators after signing a Memorandum of Understanding (MoU) with Vietnam’s Ministry of Industry and Trade (MOIT) to establish a close partnership in the field of ethanol policy through technical assistance.

3. Current Market Situation & ETOH Advantage

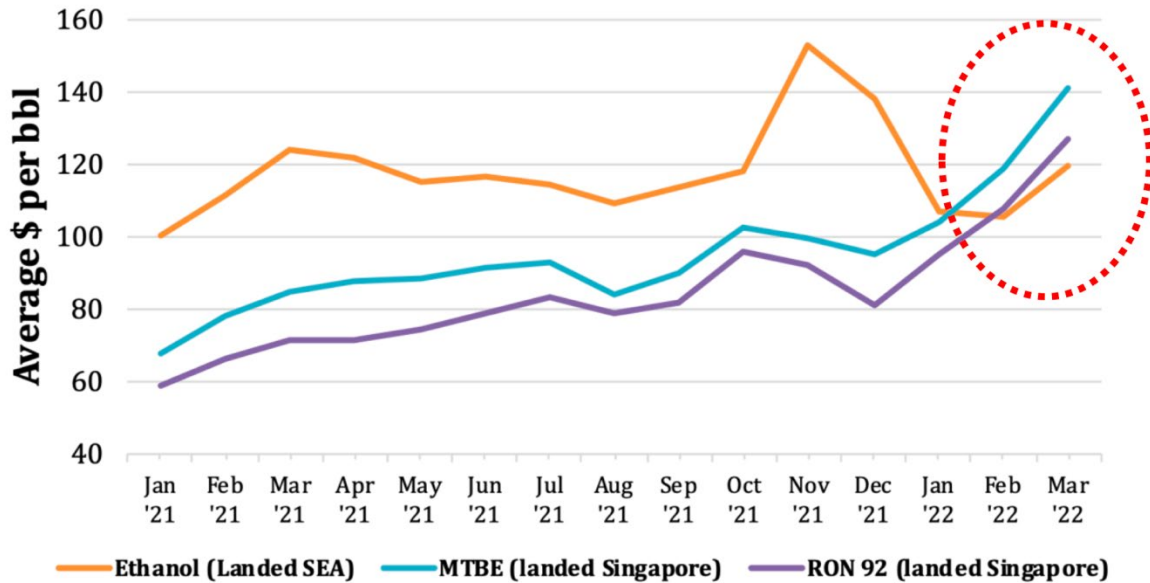
Compared to other octane enhancers in Southeast Asia, ethanol is more price competitive, providing buyers and governments savings on the cleaner octane option.

March 2022 Pricing			
	Ethanol (landed SE Asia)	MTBE (landed Singapore)	Gasoline RON92 (landed Singapore)
Average \$/bbl	119.64	141.45	127.30



“Ethanol is economically feasible compared to other regional octane boosters such as methyl tert-butyl ether (MTBE) and benzene. With this, we see interests from governments and national oil companies on fuel-ethanol,” said Aaron Goh, USGC regional ethanol consultant.

Ethanol vs Gasoline and Blending Components



*Source: Platts

The Council anticipates interest from regional traders to expand going forward, a further tailwind to the commercial case for ethanol and higher blend rates across the region. Southeast Asia imported 115 million gallons of ethanol from the U.S. in 2021. If economics and the current policy stay in place on the Indonesian fuel specification, an additional 150 million gallons of ethanol could be traded into Southeast Asia in 2022.

4. Looking Forward

With travel restrictions loosening across Southeast Asia for the first time since the start of the pandemic, the Council’s regional team is preparing to travel to key ethanol markets in the coming months to further implement and execute market development activities.

The Council, collaborating with Indonesia’s renowned Institut Teknologi Bandung, will soon launch a comprehensive strategic roadmap for biofuel implementation in Indonesia that lays out the economic and environmental case for accelerating the adoption and proliferation of a domestic fuel-ethanol industry at the policy level. The roadmap will be presented to policymakers at upcoming workshops leading up to the



G20 Summit hosted in Indonesia later this year. Moreover, the Council in May 2022 will lead an ethanol trade mission to the U.S. for Indonesia policymakers and buyers to provide further technical and market information on the U.S. ethanol industry.

Our upcoming activities in Vietnam will comprise a roll out of findings from a gasoline consumer survey to key market players and policymakers. The Council recently commissioned a study on the behavior and sentiment of Vietnam's retail consumers of gasoline, particularly as it relates to ethanol blended gasoline. The data will be socialized to both government decisionmakers and major gasoline retailers to build support for the expansion of Vietnam's ethanol use.

In the Philippines, the Council is developing deeper technical relationships with the domestic ethanol industry and independent gasoline retailers. These stakeholders support higher discretionary ethanol blends.

In Malaysia, the Council held a seminar on March 31 for the country's major downstream players that highlighted the economic and technical benefits of ethanol blending into gasoline. The event, the first such in-person ethanol seminar in the region in nearly two years, generated interest from regional companies that are key drivers for the adoption of ethanol blending in the region's fifth-largest gasoline market.

"We have assembled a strong team in Southeast Asia to tackle the market potential for ethanol in the region. With new faces like Chris Markey and Aaron Goh alongside familiar Council teammates Kent Yeo and Tran Trong Nghia, we are positioned to accelerate our policy efforts in our key markets" said Caleb Wurth, Southeast Asia and Oceania Regional Director. "We are refreshing our targets to match opportunities in front of us. With our regional strategy, we hope to deliver long lasting, sustainable partnerships between USGC members and Southeast Asia and Oceania."