



Middle East, Africa and Europe Ethanol Market Update

Increased Market Potential in the Middle East, Africa and Europe Region

Table of Contents:

1. U.S. Ethanol Exports to the Middle East, Africa and Europe
 2. Market Update
 3. Current Market Development Efforts
 4. Past Market Development Efforts
 5. Looking Forward
-

1. U.S. Ethanol Exports to the Middle East, Africa and Europe

The Middle East, Africa and Europe accounted for 16 percent of U.S. ethanol exports in the 2020/2021 marketing year, totaling around 196 million gallons (69.6 million in corn bushel equivalent). Imported ethanol was used for both fuel and industrial purposes.

Top markets included 48 million gallons to the Netherlands, 35 million gallons to Nigeria, 19 million gallons to the United Kingdom and 22.8 million gallons to the Arabian Peninsula (mainly United Arab Emirates (UAE), Oman and the Kingdom of Saudi Arabia).

2. Market Update in the Middle East, Africa and Europe Region

In Europe, there is an increased demand for fuel ethanol in Europe's major consuming countries including France, Germany and the United Kingdom. This increased demand for fuel ethanol is driven by the increased price differential with the higher-priced gasoline at the pump compared to E5, E10 and E85 blends.

However, the escalating prices of energy in the European Union (E.U.) coupled with limited feedstock flows from the Black Sea region and limited alternatives are concerning ethanol producers in the E.U. and reducing their current margins. This has also pushed some member states to investigate changing their domestic mandates in reaction to the current crises.

Reductions in ethanol mandates in Europe will challenge the current refining capacity as ethanol today is the main enhancer of gasoline fuel in Europe, and as such, replacing ethanol with non-bio high-octane gasoline components will be difficult to replace.



As for the Middle East, today there is an aggressive stance against greenhouse gases (GHG) through Saudi Arabia's Vision 2030 & UAE's Vision 2021, and Oman Oil Marketing Company (OOMCO), for example, has signed an agreement with Wakud International to procure biodiesel to OOMCO's customers, which shows that the continent is looking for other alternatives to reduce their carbon footprint.

African oil demand is recovering steadily with demand reaching pre-coronavirus pandemic levels, and the continent is set to experience the strongest growth in consumption among the continents of the world due to its considerable demographic and economic growth. This rapidly growing African fuels market will be an enabler to creating an E10 policy environment and regulatory change for the countries that the Council is heavily engaged in, such as Egypt, Nigeria, Ghana and South Africa.

3. Current Market Development Efforts

Following COVID, the EMEA office has remained engaged in providing technical and policy support despite COVID-19 restrictions in 2021 and early 2022.

This year, the office has covered key ethanol markets in the region and has organized an ethanol trade mission to Ghana and Nigeria to conduct visits with industry groups, oil traders, oil marketing companies and associations and meet with government officials to promote ethanol's octane economics, ethanol environmental benefits in the reduction of GHG and CO2 emissions and support the adoption of an E10 policy in Nigeria and Ghana.

Following this mission, the EMEA office is looking to cooperate with local agencies on an ethanol cost-benefit analysis study for Nigeria and administer a pilot program with the oil marketing companies and gasoline importers to address their needs on handling, infrastructure and phase separation and establish best practices for standards, monitoring and compliance.

The EMEA office has also conducted a forum in cooperation with the African Refiners and Distributors Association (ARDA) with key industry stakeholders and government officials from the African continent to discuss the finished fuel standardization, route to self-sufficiency followed by a case study on specific markets that have adopted an ethanol blending mandate.

4. Past Market Development Efforts

In November 2021, the EMEA office conducted an ethanol trade mission to the E.U. and the United Kingdom to interact with key multilateral organizations and network with

industry groups and key ethanol traders. This mission also focused on the E10 deployment process which began in early September 2021.

The office has also organized a series of ethanol technical workshops that focused on in-depth discussions with key importers and stakeholders from West Africa (mainly Nigeria and Ghana) and North Africa (Egypt, Algeria, Tunisia and Morocco). These virtual workshops have focused on fuel sampling, monitoring, quality testing and the ethanol supply chain and distribution from a U.S. perspective and the substantial benefits in emissions reduction, environmental impacts and improving health outcomes of ethanol-blended fuels.

Furthermore, the Council has engaged ethanol buyers and importers based in the region through an ethanol procurement course, co-hosted by the Northern Crops Institute (NCI) and in partnership with North Dakota State University (NDSU). This 3-week course covered background on corn and ethanol production in the U.S., life cycle analysis of U.S. ethanol and the U.S. industry's willingness to commit to ensuring ethanol achieves a net-zero carbon footprint, on average, by 2050 or sooner. The course has also looked at major fuel policies globally and the different available voluntary schemes to meet such policies, as well as information on storage, handling and distribution with a focus on supply chain management and retail station compatibility and best practices.

5. Looking Forward

In 2022, the Council hopes to engage and reconnect in person with many of its global ethanol stakeholders and check in on progress toward higher ethanol blends.

Policymakers in the region are taking input from the Council on regulations that would facilitate the use of U.S. ethanol in the Middle East, Africa and Europe. In addition, the Council's interaction with oil companies in Africa has aided in facilitating discussions between refiners and legislators to understand that ethanol can provide a substantial competitive advantage to local distribution and trading, reduce particulate matter emissions and reduce Sulphur content requirements.

In Europe, the Council's approach continues to be to engage with multilateral groups following its active engagement with the International Energy Agency (IEA) this past year, and today, the organization is continuing to develop relationships with groups such as the Organization for Economic Co-operation and Development (OECD), the United Nations Framework Convention on Climate Change (UNFCCC) and are continuing to develop and explore new relationships with other multilateral organizations.

The Council is also working to elevate ethanol in net-zero scenarios through our participation at COP 27 this November in Sharm el-Sheikh, Egypt.



In Africa, the Council is continuing to engage with policymakers and industry groups mainly in Egypt, Nigeria and Ghana to create enhanced market awareness and understanding of U.S. ethanol as well as create a policy environment and regulatory change for an E10 policy.

In the Middle East, the Council is monitoring policy changes in the region to ensure that an E10 policy will be one of the solutions to net-zero commitments in the region.

The organization's overall goal is to improve the global trade of ethanol by increasing and expanding the use and role of ethanol in price competitiveness and in benefitting the environment and air quality.

The Council's regional office in Tunis actively operates programs on developing or expanding ethanol use in more than 20 countries and the E.U. These efforts focus on increasing the value of ethanol in the region, especially as individual countries work to meet commitments to reduce GHG emissions under the Paris Agreement.