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Fuel Quality Improvements Hindered by Domestic Challenges in Asia Pacific

Stratas Advisors

As countries in Asia Pacific begin opening up after more than a year of sporadic lockdown measures enforced to contain the COVID-19 pandemic, increased human activities return fuel consumption to pre-pandemic level. As demand for fuel picks up, governments are responsible for ensuring domestic demand are met, however since the lack of investments in local refineries (previously withdrawn due to low demand for fuel during lockdowns), most refineries' capacity are reduced. Coupled with rising cost of commodities due to inflation, the challenge for governments and relevant agency bodies lies in meeting domestic demands while ensuring fuel prices are kept affordable for its people. Navigating this difficult socio-economic climate calls for greater support from the government to offer remuneration and subsidies packages, as well as increased cooperation with those in the private industries such as carmakers to facilitate plans to improve fuel quality.

Against this backdrop, advancing fuel quality may be a costly endeavor amidst a recovering economy. Yet, countries of Malaysia and Indonesia implemented tighter fuel specifications between 2021 and 2022, while Pakistan started importing 10 ppm sulfur max diesel in 2021. As the region gradually copes with the onset of the pandemic and adapts to a new normal, countries such as Australia, Bangladesh, Indonesia, New Zealand, Philippines, Singapore, Sri Lanka and Vietnam faced delays in refinery upgrading, capacity cuts and/or shutdowns due to increased cost of production. Significantly, gaps between emission standards and fuel quality remain a work-in-progress in the region.

With oil demand severely dented by the pandemic and the Russia-Ukraine crisis in place since February 2022, businesses and consumers have to bear additional costs which impedes refinery upgrading projects for fuel quality improvements as they are likely to raise issue with higher costs incurred. While issues of coordination and cost posed problems to adopting tighter fuel specifications, governments and refiners continue to juggle between economic recovery and ensuring domestic demand for fuels are met. Hence, the pledge for fuel quality improvements in Asia Pacific should still be acknowledged as countries actively seek to import cleaner fuels and upgrade their refineries to produce fuel meeting tighter specifications albeit delays in implementation and production.

Since there is no coordinating regional structure in Asia Pacific such as that of the European Union (EU), fuel quality specifications and regulations vary substantially from country to country and often between urban and rural areas within countries, especially in China and India. Many have developed fuel specifications based on those implemented in the EU, with the limits of some fuel properties amended to meet domestic conditions. However, each country has its own timeline for moving to more stringent fuel standards. In general, Asia Pacific countries have made significant progress toward improving fuel quality in a relatively short timeframe. Sulfur reduction remains at the core of fuel quality policies in Asia Pacific (see map below), with various biofuels mandates and targets being carried out concurrently.

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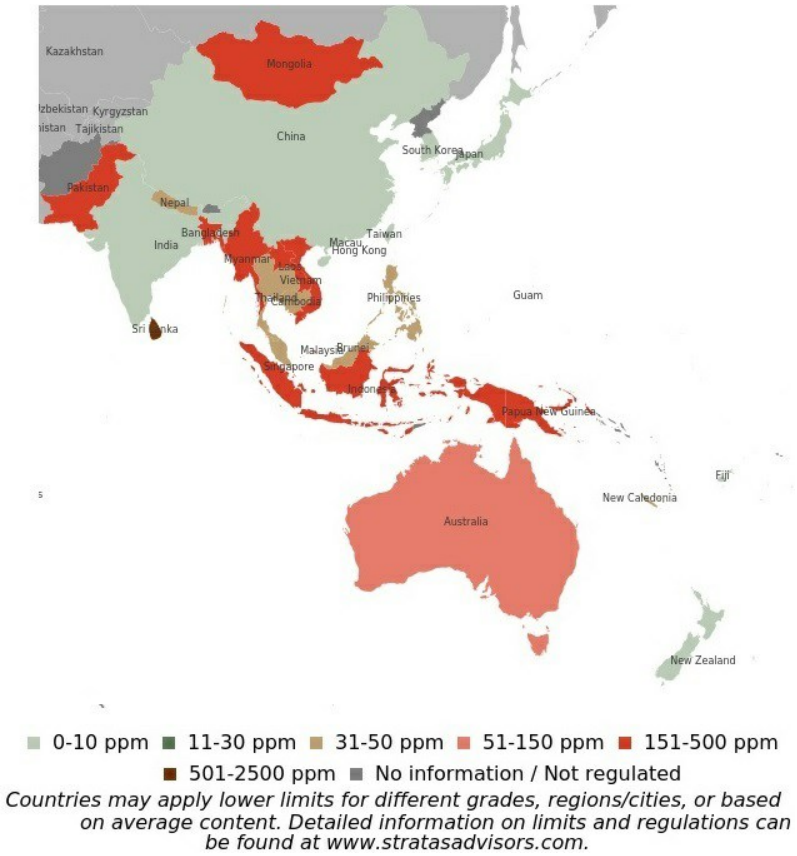
All in all, developing countries such as Bangladesh, Cambodia and Laos continue to trail behind rapidly developing and developed countries due to their socio-economic climate where poor knowledge and weak enforcement measures on fuel quality continue to plague efforts in implementing improvement plans. In addition, as countries seek economic recovery, instances where fuel quality is compromised at the expense of prioritizing supply security will become more widely observed. However, even so, there are reasons to remain optimistic. As air pollution worsens, governments in Asia Pacific are increasingly aware of the importance of fuel quality and are committed to sustain a cleaner environment by pledging to cut emission and net zero commitments. Investments are also gradually put in place to supply cleaner fuels. As such, while progress is slow, the region is not without progress at all.

Looking forward to the second half of 2022, while there are no countries planning to tighten their fuel quality specifications at this stage, Vietnam may possibly provide updates for draft regulation QCVN 2021/BKHCN mandating a 10 ppm sulfur max limit for gasoline and diesel since it was originally intended to be published concurrently with the implementation of Euro 5/V emission standards in January 2022. In addition, as Indonesia strives to drive gasoline consumption towards higher octane ratings by assigning RON 90 as the newly subsidized fuel from March 2022, it would be noteworthy to follow subsequent developments.

Current Gasoline Sulfur Limits in Asia Pacific



Countries may apply lower limits for different grades, regions/cities, or based on average content. Detailed information on limits and regulations can be found at www.stratasadvisors.com.

Source: Stratas Advisors, May 2022

The full report updates a previous report (see Insights, Jan. 27, 2021), and summarizes changes to gasoline, diesel and biofuels specifications from 2021 to April 2022 in the Asia Pacific region. An outlook for planned changes in fuel specifications beyond April 2022 is included as well.

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