

The APERC Gas Report 2023 offers a look into the main developments in the gas market in the APEC region in 2022.

The Russia-Ukraine crisis disrupted fossil fuels' consumption and trading trends around the world. The natural gas market was especially affected as OECD Europe made efforts to decouple its energy system from Russian gas imports. The changes in gas supply in the European market caused a surge in LNG demand; as a result, Europe and Asia competed for LNG supplies. The tightening of the global gas market coupled with LNG infrastructure challenges, in both exporters and importers, resulted in record high prices for LNG in the spot market during the summer of 2022.

APEC's natural gas consumption stagnated in 2022 as gas consumption trends in the region were mixed. The United States and Canada drove consumption growth in the region with a 3.6% and 5.7% growth rate, respectively. Demand contraction in the region was driven by slower economic growth in China, the impact of international sanctions on the Russian economy, lower gas consumption by the power sector in Japan, and lower domestic gas production coupled with high gas import prices in Thailand.

Of all the downstream sectors, the power and heat sector consumed the most natural gas in the APEC region, accounting for 40% of total gas consumption. The power and heat sector accounted for 944 bcm of regional consumption in 2021 and presented a year-over-year growth of 5.3%. The next two major natural gas users were the building and industry sectors---together accounting for 38% of natural gas consumption in the region in 2021.

Natural gas production in 2022 continued to be dominated by shale gas in the United States and conventional gas in Russia. Marketed gas production in the United States reached 1013 bcm (3.7% y-o-y) while Russia reached 634 bcm (-11.8% y-o-y). The next largest producers in the APEC region, Canada, China, and Australia showed gas production growth rates above 4%, with Canada reporting the largest percentual growth supported by tight gas production.

Natural gas production in Southeast Asia continued to decline in 2022. The majority of gas producers in APEC Southeast Asia showed production declines throughout the last decade, a trend that was not reverted in 2022. Indonesia and Thailand experienced the steepest declines in gas production over the last decade, largely due to their reliance on maturing gas fields.

LNG exports in the APEC region experienced a 6.7% y-o-y increase in 2022. The growth in LNG exports was driven by the United States and Malaysia increasing their annual exports by 14% and 13%, respectively. U.S. LNG's share in the European market increased as Europe scrambled to lessen its reliance on Russian gas imports. Malaysian LNG export growth in 2022 was driven by Asian buyers as U.S. and Qatari LNG was partially redirected to Europe.

The wave of regasification infrastructure projects in Asia signals an increase in LNG imports in the region. APEC economies in Asia, led by China, are increasing their regasification capacities as energy transition strategies and energy security plans call for growth in gas consumption. Asian economies are expected to become more reliant on LNG imports, increasing the risk of exposure to volatile supplies and prices.