

ANGVA2U Info 07

/2020 6th May 2020. (for ANGVA members only)

ANGVA2U Info aims to share information, data, and news related to NGV with ANGVA members. However, these information, data, and news are collected and shared in good faith, without any guarantee of accuracies. Members are advised to use these information and data prudently and at their own risks.

1.0 Selected News / Articles

1.1 Iran

NIOPDC preparing infrastructure to distribute 30 mcm/d of CNG <u>www.tehrantimes.com</u> 3rd May 2020



TEHRAN - Director of Compressed Natural Gas (CNG) Projects at the National Iranian Oil Products Distribution Company (NIOPDC) says the necessary infrastructure is prepared for developing the CNG sector to be able to distribute 30 million cubic meters per day (mcm/d) of gas across the country.

"The Oil Ministry and National Iranian Oil

Products Distribution Company have created the infrastructure for the development of the CNG industry, only in the conversion sector development measures should be taken," Hamid Qasemi Dahcheshmeh told Shana.

The official noted that Oil Ministry has been supportive of the industry since very beginning through supporting the production of CNG-powered engines and converting automobile plants to produce dual-fuel cars in this regard.

"In the previous years, 920,000 vehicles were converted through the Oil Ministry's direct contracts," he added.

He further noted that currently over 2,500 CNG stations are operating across the country for supplying CNG to passenger cars and a few stations are also providing gas to heavy vehicles like buses and trucks.

The mentioned CNG stations account for 22 percent of the country's fuel basket, according to Dahcheshmeh.

According to a report by NIORDC released in early February, consumption of compressed natural gas in Iran increased by 31 percent since the implementation of the gasoline rationing scheme up to the mentioned date.

As reported, the country's CNG consumption which stood at 19 mcm before the implementation of the fuel rationing scheme, increased to 25 mcm in February.

The Iranian government started, On November 13 2019, rationing of subsidized gasoline and increased fuel prices as it plans to use the revenue for supporting underprivileged families.

Later that month, the head of NIOPDC's CNG promotion program announced that CNG consumption in the country had increased by 10 percent only two weeks after the beginning of the program.

According to Hassan Qolipour, more than 2,478 compressors are installed in the country's CNG stations.

Source: <u>https://www.tehrantimes.com/news/447445/NIOPDC-preparing-infrastructure-to-distribute-30-</u> mcm-d-of-CNG

1.2 Pakistan

APCNGA demands reduction in gas price for CNG sector's survival www.thenews.com.pk 5th May 2020



Islamabad: To save natural gas sector from collapse there is need of difference in prices of petrol and CNG. The price of gas should have been reduced after decreasing the price of petrol to keep the troubled business of CNG viable as both the fuels are linked, said Ghiyas Abdullah Paracha, Central Chairman APCNGA.

He said that CNG sector is crumbling due to costly natural gas, unbearable burden of taxes, and indifference of the government which will leave thousands of dealers bankrupt, around four hundred thousand people unemployed while an investment of Rs400 billion will go down the drain.

Ghiyas Paracha said that there are some five hundred thousand vehicles in the country, which cannot be run on the petrol, which will be halted resulting in a nightmare for many. He said that some favourite sectors are addicted to subsidies since long while the burden of their subsidies is shifted to the CNG sector, which is unjustified.

Now the CNG sector is unable to bear the burden of blue-eyed sectors, therefore the government should reduce subsidies to make natural gas economical for the CNG sector, he demanded.

He said that CNG stations in Sindh, Khyber Pakhtunkhwa and Baluchistan are using natural gas for whom gas tariff should be reduced, taxation should be relaxed and GIDC should be abolished so that they remain viable.

He lamented that government continue to support influential sectors and business mafia but it has always ignored the CNG sector and if the situation was not improved the leaders of the CNG sectors will be unable to stop dealers and workers from protests, he warned.

Source: <u>https://www.thenews.com.pk/print/654368-apcnga-demands-reduction-in-gas-price-for-cng-sector-s-survival</u>

1.3 United Kingdom

Cadent backs launch of major bio-CNG HGV refueling station

By Jane Gray. networks.online 30th April 2020

Gas network's £250,000 infrastructure investment ensures supplies to existing connected customers have not been impacted



An investment of £250,000 in Cadent's gas distribution infrastructure has supported a successful "go live" for Europe's biggest bio-CNG HGV refuelling station to date.

The new facility at Omega South, near Warrington, is capable of refuelling 800 trucks a day using certified 100% biomethane compressed natural gas, which is sourced from waste.

That gas is carried to the refuelling station via the same pipeline that also feeds gas to around 4,000 local homes, as well as a food production factory, a fact which required local gas distributor Cadent to undertake careful analysis of the potential for disruption to local supplies.



To mitigate potential risks, Cadent carried out a £250,000 programme of work to upgrade local infrastructure to accommodate higher gas pressures.

This included installing new underground pipes and the construction of a new "governor station". The project also required diversion of a high voltage electricity cable, to construct the base of the new governor.

Commenting on the successful completion of this project and "go live" for the low carbon HGV refuelling station earlier this month,

Kevin Flynn, engineering support manager at Cadent, said: "We've enabled Europe's largest Bio-CNG station to have the gas its needs to operate at full capacity without impacting supply to heat local homes. That's a tremendous achievement; a real engineering success to shout about.

"The main construction work happened earlier this year, over several weeks, but the detailed analysis, design and testing that preceded this phase was considerable too, involving many colleagues at Cadent, as well as our partner Balfour Beatty, our customers and Scottish Power."

Flynn also described the project as a "major milestone" for the decarbonisation of the UK gas network and for the decarbonisation of transport. He said it lays the foundations for "very soon" adopting hydrogen into Cadent's gas network, "to heat homes, to fuel transport and to meet demand for gas used in many industrial processes."

The latter stages of this infrastructure upgrade project were undertaken during the period of lockdown across the UK to combat the spread of coronavirus. Flynn said this required the project team to adopt additional PPE and work within social distancing guidelines.

Source: <u>https://networks.online/gas/cadent-backs-launch-of-major-bio-cng-hgv-refuelling-station/</u>

1.4 Norway



LNG shut-ins? COVID-19 to also hit liquid gas www.saudigazette.com.sa 5th May 2020.

OSLO — A prolonged decline in demand will always bring storage constraints for fuels that need to be stored and shipped before being consumed. Oil has been hit much more quickly than other fuels by the unprecedented demand destruction caused by COVID-19, with prices plunging to historical lows and storage filling up. Liquefied natural gas (LNG) is next in line, a Rystad Energy analysis finds.

Global LNG supply is forecast to reach 380 million tons (Mt) in 2020, 17 Mt higher than in 2019. Demand, on the other hand, is expected to rise only 6 Mt from 2019 to 359 Mt according to our current estimate, as industrial activity has declined due to the pandemic.

The consumption, or demand, is more flexible for LNG than for other fuels as different fundamentals such as weather can rapidly change during the year. If the world faces a colder-than-forecast winter and lockdowns are lifted faster than expected, then demand will see a boost.

The opposite could happen if the winter is milder or if resumption of industrial activity sees further delays.

Normally a reasonably oversupplied market is not necessarily a problem as buyers take advantage of the lower prices to utilize more gas for power generation and to store gas/LNG after the winter season. But in 2020, when ample LNG supply is coupled with demand destruction, prices have already hit record lows and storages have already filled faster than usual. Production shut-ins are becoming a realistic possibility.

Europe became the de facto global LNG sink in 2019, when the milder-than-expected winter slowed down LNG demand growth in Northeast Asia. Europe imported about 80 Mt of LNG in 2019, an 80% increase from 2018.

In the first two months of 2020, when the coronavirus pandemic hit Northeast Asia heavily, Europe managed to increase LNG imports by 35% compared to the same period in 2019, mainly driven by the UK, Spain and Belgium.

The impact on LNG imports to other European countries has not been as significant as initially expected, however. European demand has been rather resilient to COVID-19 as buyers stock up on cheap supplies: The continent realized a monthly record-high LNG import of 8.9 Mt in March, a 20% year-on-year increase.

Where is the problem? Gas storage space is a key factor for Europe's ability to absorb excess LNG volumes. At the end of March 2020, about 62 billion cubic meters (Bcm) of gas was in European storage, 16 Bcm higher than in March 2019.

If gas storage approaches top capacity at the end of the filling season, as was the case at the end of October 2019 (98% full), European gas inventories now only have space for some 48 Bcm of gas before winter 2020.

Front-month gas contracts at the TTF trading point in the Netherlands have been trading below \$2 per million British thermal units (MMBtu) in April, suggesting that gas traders could take advantage of the historical low gas prices and fill Europe's storage facilities faster than usual.

As a result, European storage could reach its limit and LNG cargoes with deliveries in the summer months are at risk of being canceled.

And the continent's demand is not growing much either. Europe consumed 554 Bcm of natural gas in 2019, 13 Bcm more than in 2018, primarily driven by coal-to-gas switching in the power sector.

We expect European gas consumption to remain at the 2019 level, with a possible mild increase in the power sector. Not much, though, as the coal-to-gas switching in is well maxed out.

"Asia is not likely to take up the full slack. Europe will be under serious pressure to absorb LNG, but it looks like this will be tough given storage levels, lower demand, and the cost of sending it there, especially from the US.

"If global gas prices slip even further in 2020, this could translate into potential LNG shut-ins," says Xi Nan, vice president for gas and power markets at Rystad Energy.

In Asia, the signed term contracts can provide Japan and South Korea with enough LNG, meaning the two countries don't need much gas from the spot market.

Chinese LNG buyers, including smaller players, are able to absorb some excess volumes, but less than the expected levels before the pandemic.

India is expected to continue utilizing low gas prices and purchase spot cargoes only when the lockdown is fully lifted.

We still don't have an end date for when Europe will completely re-emerge from lockdown, and the impact will probably be deeper coming into the summer months.

With gas storage tanks already almost filled to the brim, Europe's capacity to import and actually use the same amount of LNG as in 2019 seems like a tall order, especially if we see another mild winter. — Rystad Energy

Source: <u>https://saudigazette.com.sa/article/592721/BUSINESS/LNG-shut-ins-COVID-19-to-also-hit-liquid-gas</u>

1.5 South Korea

Hyosung to build world's largest liquid hydrogen plant in Ulsan By **Jo He-rim** (herim@heraldcorp.com) www.koreaherald.com 28th April 2020.

Despite pandemic, Cho Hyun-joon bets big on hydrogen economy



Hyosung Group Chairman Cho Hyun-joon (left) and Linde Korea Chairman Sung Baek-seok sign a memorandum of understanding on building a liquid hydrogen plant at Hyosung Group headquarters in Seoul on Tuesday. (Hyosung Group)

South Korean textile and chemical conglomerate Hyosung Group announced Tuesday its plan to build the world's largest liquid hydrogen plant in Ulsan in cooperation with global chemical company Linde.

Hyosung Group's Chairman Cho Hyun-joon and Linde Korea's Sung Baek-seok signed a memorandum Tuesday, agreeing to invest 300 billion won (\$244 million) until 2022, to establish a comprehensive value chain for liquid hydrogen production, delivery and facility operation.

The two companies agreed to construct the new liquid hydrogen plant on a 30,000-square-meter area inside Hyosung Chemical's Yongyeon Plant in Ulsan. The envisioned plant is expected to produce 13,000 metric tons of liquid hydrogen per year, enough to power 100,000 cars, the company said.For the plant construction, Hyosung and Linde, which is based on Germany, will establish a joint corporation within this year and embark on the work in the first quarter of 2021, the company said.

"Hydrogen is an environment-friendly energy source with endless potential, that can change the carbon-centered economic structure," Cho said. "The core of our liquid hydrogen business is to enable storing and delivering of hydrogen efficiently and safely. I believe the investment will play a role in activating the domestic hydrogen industry."

Linde's Sung said their cooperation with Hyosung will create "synergy." "Linde Group has been producing and using liquid hydrogen in the US and Europe for the past 30 years, and we are developing various applications that can be used in the mobility sector," Sung said.

The hydrogen produced as a byproduct from the Yongyeon Plant will be reprocessed as liquid hydrogen with Linde's technology and facilities. The final product would be possible to use in electric cars but also in drones, ships and trucks, Hyosung said.

The company said it will also come up with charging infrastructure for liquid hydrogen around the time of the completion of the construction 2022. It plans to build 50 new hydrogen charging stations and expand the 70 existing ones.

Hyosung Group's affiliate Hyosung Heavy Industries has been in the compressed natural gas charging system business since 2000. The company started building hydrogen stations in 2008, and is currently leading the industry in Korea, with a 40 percent market share, Hyosung Group said.

Source: <u>http://www.koreaherald.com/view.php?ud=20200428000738</u>