

LNG Monthly Markets

LNG JOURNAL'S COMPREHENSIVE MONTHLY LNG DATA REPORT

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Summary & Highlights

Monthly trade declined by 3.45mmt in February, led by the United States, Australia and Qatar

Global conventional LNG trade suffered a significant reduction in February, retreating by 3.45mmt down to 32.27mmt (-9.7%) from the 35.72mmt recorded in January. However, February's performance in 2020 still marks an increase of 2.64mmt over 2019, equating to 8.9% year-on-year growth. At the time of writing, 1.83mmt (5.7%) of the exported 32.27mmt in February remain to be delivered; their current delivery horizon is 31 March.

Trade varied significantly by basin. As such, February's month-on-month performance reduction in terms of volume was primarily due to the Pacific Basin, where trade was down 1.51mmt (-10.9%) on January's 13.86mmt. Coming in a close second by volume, Atlantic trade decreased by 1.13mmt (-8.4%) from 13.40mmt in January. A significant drop by rate was also observed in the Middle East, with monthly trade declining by 1.01mmt (-10.7%) from January's 9.46mmt. Notably, Middle Eastern trade also saw a reduction year-on-year, whereby at 8.92mmt volumes were 0.48mmt higher in February

2019 than in February 2020, representing a 5.3% trade decrease for that Basin. This points to an ongoing weakening of the Middle East's LNG supply position vis-à-vis the Atlantic and Pacific basins, with Middle Eastern shipments declining in the face of ongoing trade growth in the other two basins. Pacific LNG trade grew by 0.50mmt (4.2%) whilst Atlantic trade increased rapidly by 2.61mmt (29.3%) year-on-year.

The decrease in trade in February was partly due to seasonal demand reductions following a period of heightened demand between November and January. Meanwhile, public health measures in response to the coronavirus outbreak in China and other North Asian LNG demand centres that were rolled out in January had also come into full swing by the beginning of February. These included quarantining major metropolitan areas such as Wuhan and Beijing as well as shutting down industrial capacity, which intensified the worldwide seasonal demand swing. Some Chinese LNG buyers mulled but did not force

delivery cancellations under force majeure at the time, which prevented further offtake reductions. Regardless, Chinese demand still retreated by 2.15mmt (-37.2%) month-on-month. We observed frequent vessel delays due to long out-of-port waiting times and some diversions. In Australia and the South China Sea region, several vessels usually serving routes between Dampier and China as well as Bintulu and China had effectively been idled.

US LNG capacity saw the highest utilisation decrease, amounting close to 1.0mmt in February. This was not directly related to Chinese demand decline as the protracted trade dispute between the United States and China continues to hamper LNG trade between the two countries. In other words, US LNG exporters did not lose market share in China because they did not have any in the first place. Still, lower Chinese offtakes had a negative knock-on effect on Pacific LNG spot prices, which fell close to \$3/mmBtu and therefore made many potential US LNG trades from the Gulf of Mexico to the Far East uneconomical in the absence of longer-term contracts with a price floor. As a result, significant parts of the US gas liquefaction chain took the opportunity to undergo maintenance. Nevertheless, given the overall reduction in trade, excess US LNG volumes were still compelled to seek refuge in relatively close-by Europe, where demand may be growing but not on par with major buyers in the Far East. We observed waiting times of a week or more for some US cargoes to the United Kingdom, for example, as regional gas demand was already well supplied. Notwithstanding, Atlantic intra-basin trade saw its

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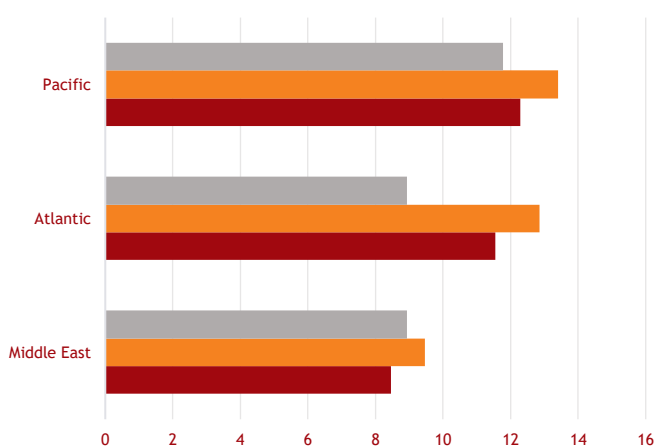
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LNG Trade in February (MMt)



Source: LNG Journal

■ February 2019 ■ January 2020 ■ February 2020

fourth consecutive month-on-month growth, having thus grown by 39.6% since October 2019.

The strong influx of LNG into Europe has also had the effect of slightly higher year-on-year re-exports, which grew by 0.02mmt

(9.5%), though due to seasonality this did not run counter to the overall monthly trade decline in February. Notably, the growth

component within these shipments remained within its respective Basin, the Pacific ♦

Inter- & intra-regional Trade

Nuanced trade performances in February with inter-Atlantic trade seeing fastest growth

February's trade performance was nuanced in terms of inter-regional and intra-regional trade. Whilst Pacific routes supplying the Atlantic Basin and the Middle East have by and large lain dormant since December last year - with the exception of a single Pampa Melchorita cargo via the Methane Heather Sally to Huelva in Spain - some trade patterns saw a significant shift as overall demand decreased in February. Whereas in January the amount of LNG shipped from one Basin to another had grown by 0.47mmt (5.8%) from 8.12mmt in December last year to 8.59mmt in January this year, that amount contracted by 1.56mmt (-18.2%) to 7.03mmt in February. Although it still constitutes the single largest general trading pattern, intra-basin trade within the Pacific also fell by 1.28mmt (-9.2%) in line with the broader decrease in February trade.

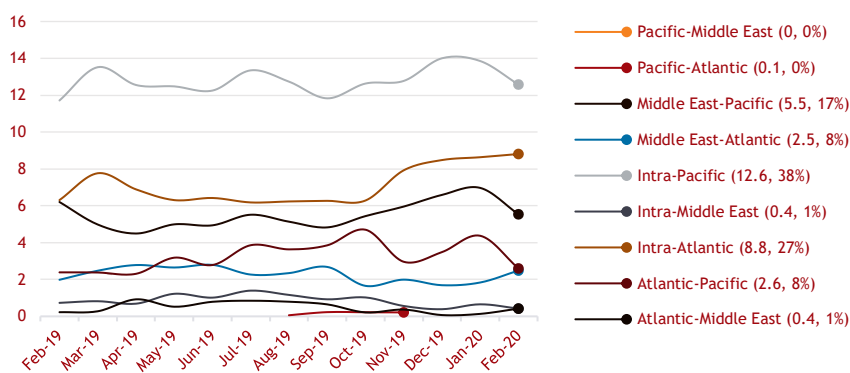
Meanwhile, inter-regional trade between the Middle East and the Pacific Basin also suffered from monthly decline of 1.43mmt (-20.5%) due to general oversupply and seasonal downturns. Notably, exports from Qatar and Oman to China fell by 0.54mmt (-65%), reflecting additional monthly demand decline due to the coronavirus outbreak. Meanwhile, the Das Island plant in the UAE, which prime markets are India and Japan, was not directly affected by the Chinese demand reduction. Instead, trade out of the UAE to the Pacific remained steady at 0.24mmt in February. Contrastingly, Middle Eastern exports

to the Atlantic Basin have seen continued growth since December last year as Europe adopted the role of LNG sink for excess cargoes. Meanwhile, Middle Eastern intra-basin trade fell close to its December level of 0.39mmt following a spike to 0.65mmt in January.

Atlantic Basin trade was led by intra-basin shipments in terms of volume, which grew by 0.17mmt (1.9%) month-on-month in February. Here, U.S. LNG export growth to Northern Europe of 0.29mmt (11.4%) stands out, though Nigerian shipments to Europe came in a close second at 0.28mmt by growing even faster (30.2%). Meanwhile, inter-basin trade from the Atlantic to the Middle East saw the fastest

month-on-month growth globally, increasing by 0.28mmt from 0.14mmt in January to 0.35mmt in February. This also constituted more than double the amount the Middle East imported from the Atlantic year-on-year, temporarily pushing out Middle Eastern supply. None of these cargoes were re-exports from Northern Europe but primarily Nigerian and U.S. cargoes that effectively stopped at destinations halfway to the Far East. The amount of Atlantic Basin LNG shipped to the Pacific almost halved from 4.37mmt in January to 2.60mmt in February (-40.5%), which was mainly due to U.S. LNG being directed to Europe instead ♦

Regional Trade Flows in February (MMt)



Source: LNG Journal

Gas on the Water

Roughly 14mmt of LNG in transit at the time of writing, led by U.S. exports

There were 6.34mmt of LNG in transit from the Atlantic Basin at the time of writing. Roughly 48.2% of that (3.05mmt) originated in the United States, with 55% (1.69mmt) currently seen on routes to destinations within the Atlantic Basin led by Brazil and Spain. U.S. cargoes to the Pacific region are amounting to 1.28mmt, led by Japan with 0.39mmt whilst we currently see only cargo en route to the Middle East whereby the *Sean Spirit* is expected to take a Freeport LNG cargo to the Hadera terminal in Israel by 24 March. Atlantic LNG exports in transit at the time of writing also consisted of 1.47mmt (23.2%) that have sailed out of Nigeria's Bonny Island facility since 11 February. Unlike the United States, more than half of Nigerian LNG is currently travelling to the Pacific, led by four cargoes totalling 0.27mmt we expect to arrive at the Hazira, Dahej and Dabhol terminals by 29 March. The bulk of in-transit Atlantic LNG is completed with a further 9% (0.61mmt) coming from Russia's Yamal LNG

and 5.4% (0.34mmt) from Trinidad & Tobago's Atlantic LNG. Notably, although both exporters are focussing on the Atlantic (led by Northern European destinations), Yamal LNG also has two Zeebrugge re-load cargoes aboard the *Pskov* (via the *Rudolf Samoylovich*) and the *Clean Horizon* (via the *Georgiy Ushakov*) en route to China at the moment. The two cargoes are expected to arrive at Tianjin on 21 March and 4 April, respectively. Current market visibility suggests an overall delivery horizon for in-transit Atlantic cargoes of 30 April 2020.

Pacific cargoes

Meanwhile, Pacific exporters currently have 4.47mmt of LNG in transit, with destinations exclusively located within the Basin. These cargoes have an overall delivery horizon of 15 April determined by a Peruvian cargo aboard the *Methane Princess* currently headed for North Asia. Australia is leading the roster with 2.8mmt (62.6%), the bulk of which is headed to Japan

(1.16mmt) and China (0.52mmt). Leading exporters of Australian in-transit LNG at the time of writing were Gorgon LNG followed by Queensland Curtis LNG, which both accounted for a total of 0.95mmt of shipped Australian gas. Notably, Australia's Prelude FLNG barge had no cargo at sea at the time of writing (see FLNG section below). Another significant share of deliveries will materialise from Malaysia, Papua New Guinea and Indonesia, which ranked roughly one cargo apart from each other and had combined shipments of 1.17mmt (26.2%) of Pacific LNG at sea. Concurrently, Russia, Peru and Brunei had a total of 0.48mmt (10.7%) at sea, which are mainly headed for Japan and other destinations within the Pacific Basin. Finally, we also observed a re-export out of Singapore via the *LNG Lerici*, which was headed for China's Dongguan LNG with an expected arrival on 23 March. Although relatively small in volume (0.03mmt), this cargo is significant because the Dongguan terminal primarily

supplies feedstock to industry in the Shenzhen area, thus indicating continued industrial output there following drastic public health measures due to the coronavirus outbreak.

Middle Eastern cargoes

In the Middle East, Qatar is leading the roster of in-transit cargoes with 3.19mmt (86.6%) out of a total of 3.68mmt. Of those Qatari cargoes, roughly 2.11mmt (66%) are headed for the Pacific Basin and the Far East, led by Japan as

prime destination with 0.40mmt. In addition, we currently anticipate China, South Korea, India and Pakistan to receive roughly three cargoes each by 1 April. Meanwhile, 1.08mmt are destined for the Atlantic Basin and Europe, led by Belgium and Italy with 0.29mmt combined. Nevertheless, 1.08mmt of Qatari LNG currently en route to buyers have yet to show a firm destination, though we expect LNG headed for the Atlantic Basin to arrive in Europe (0.42mm) and at least four out of the six Pacific

cargoes (0.47mmt) to travel to the Far East. Concurrently, Oman and the UAE have shipments totalling 0.49mmt on the water, split close to even between the two exporters as well as the three destinations both have shipped to: India, Japan and South Korea. Notably, Egypt's Idku LNG had no shipment on the water at the time of writing though the plant did export 0.15mmt in February. Market visibility at the time of writing indicated a delivery horizon for in-transit Middle Eastern cargoes of 6 April ♦

Exports & Utilisation

Pacific Exports

Decline in Chinese demand weighed on certain Australian plants in particular

The Pacific Basin ended the month of February 1.13mmt (-8.4%) down in exports compared to January, which reduced capacity utilisation by 9pp to 93%.

Australia

Its biggest exporter - Australia - shipped 0.93mmt (-12.5%) less month-on-month. The decline in Chinese LNG demand weighed on certain Australian plants with particular exposure to Chinese supply contracts. In the Pilbara region, NWS LNG in had to curtail shipments by 0.32mmt (-20.6%) whilst

Wheatstone LNG, Pluto LNG and Gorgon LNG managed to maintain broadly steady output. Wheatstone LNG shipped once cargo less in the shorter month of February whilst Pluto and Gorgon did not see a significant shift in exports. In Australia's Northern Territories, Ichthys LNG saw a decline of 0.14mmt (-18.5%) whilst neighbouring Darwin LNG kept February output the same compared to the month prior at 0.31mmt. The most significant swing in exports was observed in Australia Pacific LNG, which supplies China on an almost exclusive basis. Here exports retreated by 0.21mmt (-23.1%),

with all cargoes that were shipped going to Sinopec's Qingdao, Beihai and Tianjin terminals. The technical difficulties affecting production at the offshore Prelude FLNG barge (discussed below) added to Australia's decline in February's exports.

Southeast Asia

North of Australia, Papua New Guinea saw shipments increase by 0.13mmt (21.5%), at least partially due to a spot cargo loading that was likely shipped to Sakai or Himeji in Japan. However, neighbouring Indonesia struggled →

Table: Monthly Pacific Basin Exports Compared

Country	Plant	Import Basin			February	January	% Change m/m
		Atlantic	Middle East	Pacific			
Australia	Australia Pacific LNG	—	—	0.68	0.68	0.89	-23.1%
	Darwin LNG	—	—	0.31	0.31	0.31	0.1%
	Gladstone LNG	—	—	0.59	0.59	0.60	-2.3%
	Gorgon LNG	—	—	1.31	1.31	1.31	0.3%
	Ichthys LNG	—	—	0.62	0.62	0.76	-18.5%
	NWS LNG	—	—	1.22	1.22	1.53	-20.6%
	Pluto LNG	—	—	0.37	0.37	0.36	1.7%
	Queensland Curtis LNG	—	—	0.68	0.68	0.67	0.8%
	Wheatstone LNG	—	—	0.70	0.70	0.77	-8.8%
	Prelude FLNG	—	—	—	0.00	0.20	-100.0%
Brunei	Brunei LNG	—	—	0.46	0.46	0.59	-22.8%
Indonesia	Bontang	—	—	0.36	0.36	0.32	14.5%
	Donggi-Senoro LNG	—	—	0.17	0.17	0.17	0.6%
	Tangguh	—	—	0.47	0.47	0.54	-12.1%
Malaysia	Malaysia LNG	—	—	2.18	2.18	2.33	-6.2%
	PFLNG 1	—	—	0.07	0.07	0.07	0.0%
P. N. Guinea	PNG LNG	—	—	0.74	0.74	0.61	21.5%
Peru	Pampa Melchorita LNG	0.06	—	0.28	0.35	0.31	13.2%
Russia	Sakhalin-2 LNG	—	—	1.00	1.00	1.07	-7.0%
Total		0.06	0.00	12.21	12.28	13.40	-8.4%

Source: LNG Journal

→ to maintain steady exports, seeing February shipments decline slightly by 0.02mmt month-on-month. As with some Australian capacity, cargo delays off China have also had a knock-on effect on cargo loadings at Tangguh LNG, which

regularly supplies Fujian LNG and terminals in the broader Shanghai area. Instead of allowing LNG being subject to unnecessary boil off on the high seas, Tangguh opted to curtail exports where no other buyer - including domestic

utilities - could be found. The plant's exports thus decreased by 0.07mmt (-9.8%) to 0.60mmt in February, which was only partially compensated by the increase of 0.04mmt (7.9%) we recorded at Bontang. Indonesia's smallest

LNG plant, Donggi-Senoro, meanwhile, maintained steady output with its regular shipments to South Korea and Japan.

Next to Indonesia, Malaysia was similarly exposed to the Chinese demand wobble in February. Whereas Petronas' FLNG barge PFLNG 1 saw steady month-on-month exports of 0.07mmt with its consignments typically avoiding China by being earmarked for South

Korea, Japan or Thailand, the company's giant Malaysia LNG complex had to contend with 0.14mmt less in exports (-6.2%) in February as exports to China decreased by 0.18mmt month-on-month.

Russia and Peru

Elsewhere in the Pacific, Russia's Sakhalin-2 LNG also had to replace lost trade of c. 0.13mmt

with China with higher exports to South Korea and Taiwan. However, the plant's trade with Japan equally saw drastic decline, falling by 0.34mmt (-45.7%) in February. Finally, Peru's Pampa Melchorita LNG exported marginally more in February, increasing exports by 0.04mmt to 0.35mmt (13.2%) ♦

Atlantic Exports

Western half of Atlantic Basin saw much steeper export reduction than eastern half

Africa & Russia

The amount of LNG exported within the eastern part of the Atlantic Basin - comprising Africa, Europe and Russia - decreased by 0.32mmt (-5.5%) month-on-month in February. Although Equatorial Guinea, Algeria and Cameroon saw significant growth that month by increasing exports by 0.20mmt combined, some of the Basin's major exporters by capacity saw sharp declines in output. As such, Russia's Yamal LNG decreased cargo loadings by 0.30mmt (-17%) whilst Nigeria's Bonny Island plant saw shipments fall by 0.20mmt (-10%). Norway's Snøhvit LNG, meanwhile, also saw a reduction in

exports, though by a more modest 0.08mmt (-18%).

United States

In the western half of the Basin, U.S. LNG exports saw a 0.92mmt (-15%) decline in shipments as the country's major export plant by capacity - Sabine Pass LNG - decreased shipments by 0.67mmt (-24%) month-on-month as major gas pipeline capacity feeding raw gas into Sabine Pass LNG and Cameron LNG underwent maintenance for almost a week in February. Cameron LNG thus elected to schedule repairs to its second train at the same time so that the plant's monthly output had also decreased by 0.07mmt (-

10%) at the end of February. Cove Point LNG also saw a significant reduction of 0.09mmt (-17%) over the same period. U.S. LNG exports in February also fell due to the absence of Elba Island LNG, which was still undergoing construction work but had exported 0.13mmt in January. Meanwhile, Freeport LNG kept exports broadly stable at 0.82mmt, a slight monthly increase of 0.03mmt (3%) in February.

South America

In South America, Atlantic LNG in Trinidad & Tobago also saw exports fall by 0.12mmt (-10%) month-on-month in February as shipments to China, Canada and the United States either fell away

or decreased drastically whilst the number of shipments to smaller buyers in the Caribbean Sea region in particular increased from one to the Dominican Republic's Andres LNG in January to one to Puerto Rico's Penueles terminal as well as two each to Andres LNG and Colombia's SPEC LNG in February.

Consequently, as the Atlantic Basin's overall shipped LNG decreased by 1.31mmt (-10%) month-on-month in February, export utilisation fell by 10pp to 90% whilst also showing significant annual growth of 22pp ♦

Table: Monthly Atlantic Basin Exports Compared

Country	Plant	Import Basin			February	January	% Change m/m
		Atlantic	Middle East	Pacific			
Algeria	Arzew	0.93	—	—	0.93	0.88	5%
	Skikda	—	—	—	—	—	—
Angola	Angola LNG	—	—	0.42	0.42	0.43	-1%
Argentina	Tango FLNG	0.06	—	—	0.06	—	—
Cameroon	Cameroon FLNG	—	0.07	0.07	0.14	0.07	94%
E. Guinea	EG LNG	0.22	—	0.15	0.37	0.22	66%
Nigeria	Bonny Island	1.23	0.22	0.36	1.80	2.00	-10%
Norway	Snøhvit LNG	0.39	—	—	0.39	0.47	-18%
Russia	Yamal LNG	1.46	—	—	1.46	1.76	-17%
T. & Tobago	Atlantic LNG	0.92	0.06	0.08	1.06	1.18	-10%
United States	Cove Point LNG	0.37	—	0.07	0.44	0.53	-17%
	Sabine Pass LNG	1.47	—	0.69	2.16	2.83	-24%
	Corpus Christi LNG	0.59	—	0.29	0.88	0.87	0%
	Cameron LNG	0.43	0.08	0.08	0.59	0.66	-10%
	Elba Island LNG	—	—	—	—	0.13	—
	Freeport LNG	0.59	—	0.24	0.82	0.80	3%
Total		8.66	0.42	2.46	11.54	12.85	-10%

Source: LNG Journal

Middle Eastern Exports

Middle Eastern exporters scaled back February exports significantly but remained above nameplate capacity

Middle Eastern LNG exporters reduced activity significantly in February, curtailing monthly shipments by 1.01mmt (-10.7%) to 8.45mmt in February. However, our historical data indicates this shift is seasonal. Notably, since Middle Eastern exports January marked the high-water line for the past 12 months at 9.46mmt, which pegged capacity utilisation at 122%, the Basin's operational export utilisation capacity (i.e. excluding Yemen) remained robust at 109% in February despite the reduction in monthly exports.

Qatar

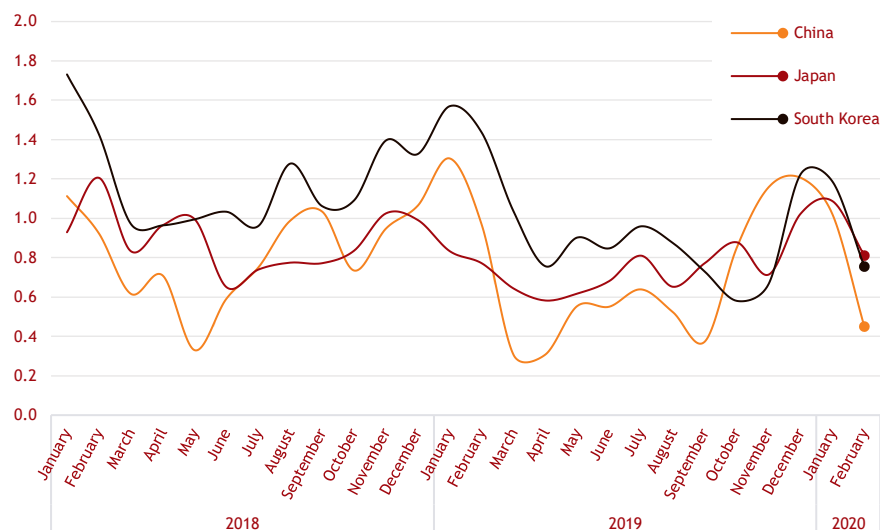
Given its size, change in Qatar's exports had a drastic effect on the Middle East's overall supply performance. Accordingly, the country accounted for 80% of the Basin's reduction in February exports after its shipments fell by 0.81mmt (-10.5%). Exports from the Ras Laffan LNG complex to the Far East suffered significantly, with shipments to China and South Korea declining by 0.57mmt (-56%) and 0.43mmt (-36.4%), respectively. Exports to Japan also fell by 0.27mmt (-25.5%). Qatar's shipments to its three most significant buyers in the Far East therefore decreased significantly faster than in 2019 but still slower than in 2018.

Oman and UAE

The two other producers in the Persian Gulf - Oman and the UAE - saw exports decline by 0.08mmt (-8%) and 0.13mmt (-21%),

respectively. Nevertheless, this also meant both were still producing above nameplate capacity. Egypt's Idku LNG, meanwhile, kept February exports steady at 0.15mmt ♦

Qatari Exports to the Far East (MMt)

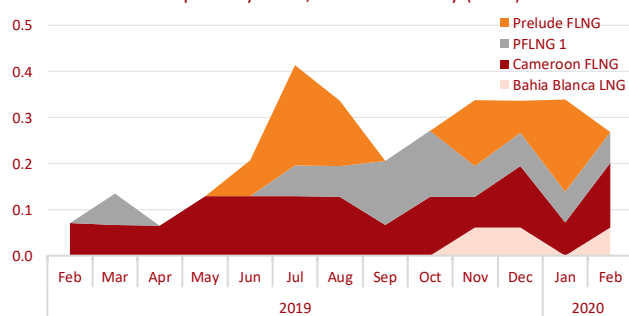


Source: LNG Journal

FLNG

Technical difficulties at Prelude weighed on robust performance in Cameroon

FLNG Exports by Basin, Year to February (MMt)



Source: LNG Journal

Global exports from FLNG plants decreased by 0.07mmt (-20.6%) month-on-month in February. Whilst the Hilli Episeyo stationed offshore Kribi in Cameroon doubled February shipments to a record 0.14mmt, Malaysia's PFLNG 1 maintained steady output and Argentina's Tango FLNG at Bahia Blanca exported its third cargo from regular production, the absence of Shell's Prelude barge weighed on overall monthly

performance. Shell was forced to temporarily suspend its FLNG shipments following an electrical fault on 2 February. The technical issue reportedly limited several amenities on board, which warranted a staff reduction on board. Prelude had seen a strong export month in January with 0.20mmt shipped. Consequently, global FLNG capacity utilisation fell from 50.7% in January to 40.1% in February ♦

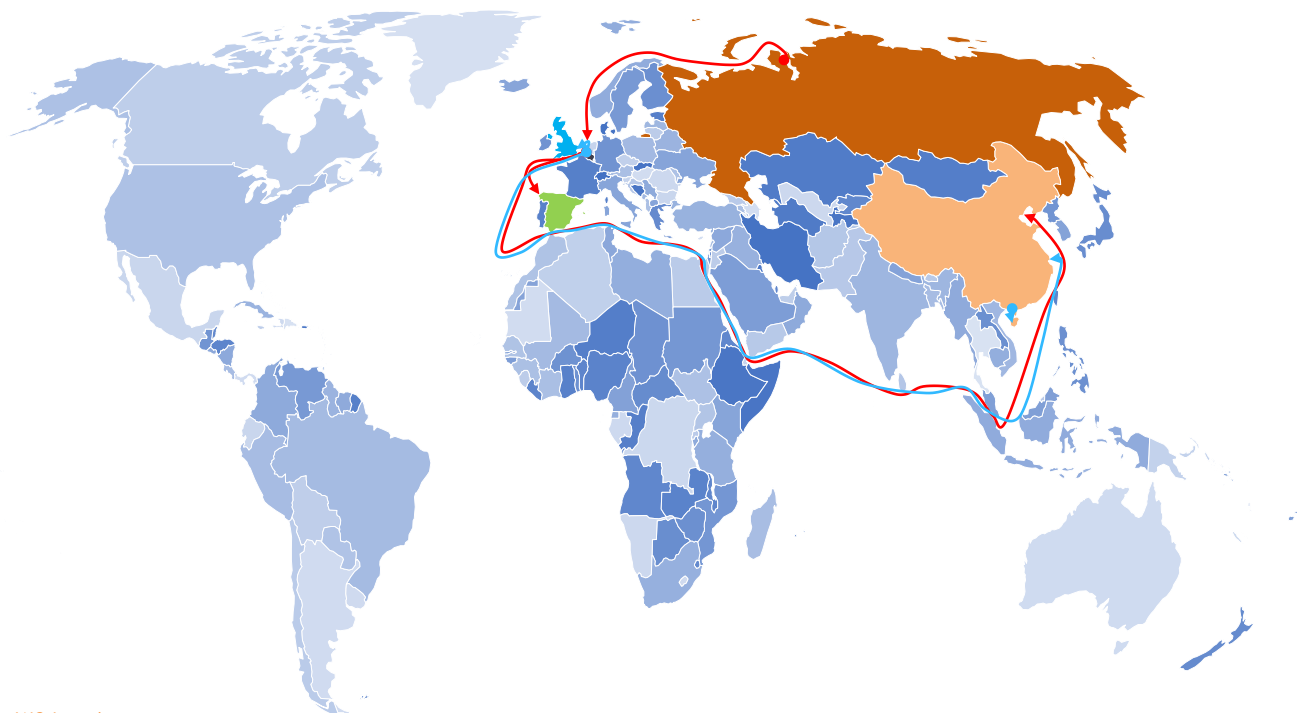
Re-exports & re-loads

Re-exports in retreat except for long-standing domestic shipments in China

Global re-export activity declined significantly by 0.23mmt (-47%) to 0.25mmt in February from 0.48mmt in January with cumulative monthly re-exports growing slower in February than the month prior. The majority of re-exports were destined for the Far East, with only one Belgian shipment making the short trip to the UK's Isle of Grain terminal via the Yari LNG. Belgium's Zeebrugge terminal remained the driver of re-exports globally with 0.14mmt, though this still constituted a 51.7% decrease month-on-month. Singapore also re-exported only one cargo via the GasLog Singapore, which arrived at South Korea's Samcheok terminal on 19th February. Nevertheless, Singapore served as a significant LNG storage during times of lagging Asian demand. As such, 0.37mmt were shipped to

the terminal in February compared to just 0.15mmt in January. We therefore expect re-exports from Singapore to grow in the coming months once the market in the Pacific begins to tighten again. Finally, China's Beihai LNG more than doubled supply to neighbouring Hainan LNG to 0.05mmt in February. Concurrently, Yamal LNG executed two re-loads in February, both at Zeebrugge. The first was a transfer from the *Rudolf Samoylovich* to the *Pskov* on 2 February. As discussed above, the transferred cargo remained en route to Tianjin in China at the time of writing. The second re-load took place on 23 February, when the *Eduard Toll* transferred its cargo onto the *Yamal Spirit* for discharge at Spain's Mugardos terminal on 29 February ♦

Map of re-exports (light blue) and re-load (red) routes in February



Source: LNG Journal

Imports & Domestic Trade

Monthly Pacific imports decreased noticeably whilst Atlantic offtakes saw only a slight reduction with Middle Eastern demand holding steady in February

Pacific Imports

In line with Pacific Basin exports, the Pacific's February imports decreased noticeably by 1.49mmt (-7%) month-on-month, pushing overall import capacity utilisation down by 4pp to 33%. The Chinese demand retreat weighed heavily on overall Pacific LNG offtakes, whereby China accounted for 86% of monthly Pacific demand reductions in February. However, this Chinese reduction cannot solely be attributed to the extensive shutdowns of public and industrial activity due to coronavirus-related quarantines. We highlight that the decrease in Chinese demand is broadly in line the demand change in February 2019, whereby China's LNG offtakes in February 2019 decreased by 2.31mmt (-35.7%) whilst they fell to 2.15mmt (-37.1%) in February 2020. Notably, whilst there were many delays for LNGCs attempting to dock at Chinese terminals in February we have observed only a handful of

diversions away from China that month.

A similar picture unfolds with regards to South Korea, a country that also had to cope with a sharp rise in coronavirus infections and implemented drastic public health measures.

Although having seen February demand decrease by 0.18mmt (-3.9%) month-on-month, that reduction was significantly smaller than the 0.67mmt (-17.1%) decline observed in February 2019. At the same time, South Korean LNG demand grew by a third to 1.06mmt year-on-year.

Other Pacific buyers, including Japan, saw only minor demand reductions. Malaysia led that roster

of buyers by decreasing offtakes by 0.09mmt in February. Japan, Bangladesh and Mexico, meanwhile, kept offtakes broadly steady.

More significantly for overall Basin demand were a roster of typically price-conscious buyers led by India. The fall in LNG spot prices as well as Brent (which is a prime factor in Indian landed LNG prices) has enticed the country to grow monthly offtakes by 0.38mmt in February. Whereas Indian demand saw a monthly reduction of 0.14mmt (-8.37%) in February 2019 it grew by 0.38mmt (17.6%) in February 2020, which constitutes 64.1% year-on-year growth. Notably, all of the country's

terminals were simultaneously engaged for the first time. The picture in Taiwan looked similar, with monthly growth at 0.32mmt (26.4%) in February this year compared to a reduction of 0.54mmt (-35.1%) last year with year-on-year growth at 0.53mmt (52.9%). Concurrently, Chile more than doubled its monthly offtakes to 0.21mmt whilst Thailand kept imports broadly stable in February. Indonesia, one of the few LNG producing countries shipping LNG within its own borders, meanwhile kept domestic trade broadly steady at 0.2mmt in February. In total three cargoes left Tangguh LNG to supply the Nusantara FSRU off Jakarta and the converted Arun LNG facility at the northern tip of Sumatra whilst three more departed Bontang to also supply Jakarta as well as the mini-FSU off Bali ♦

“China accounted for 86% of Pacific demand reductions”

Table: Monthly Pacific Basin Imports Compared

Country	Plant	Export Basin			February	January	% Change m/m
		Atlantic	Middle East	Pacific			
Bangladesh	Maheshkhali FSRU	0.14	0.18	-	0.32	0.35	-8%
Chile	Mejillones LNG	0.08	-	-	0.08	0.10	-25%
	Quintero	0.14	-	-	0.14	-	-
China	Beihai LNG	0.07	-	0.06	0.13	0.54	-76%
	Caofeidian LNG	-	0.22	0.07	0.30	0.61	-52%
	Dalian LNG	-	0.15	0.12	0.28	0.34	-19%
	Dongguan LNG	-	-	0.06	0.06	-	-
	Fujian LNG	-	-	0.12	0.12	0.24	-49%
	Guangdong Dapeng LNG	-	0.09	0.31	0.41	0.57	-28%
	Hainan LNG	-	-	-	-	0.07	-
	Hainan Transfer Station	-	-	0.01	0.01	-	-
	Jiangsu LNG	-	0.33	0.13	0.46	0.41	13%
	Jieyang LNG	-	-	-	-	-	-
	Qidong LNG	-	-	0.01	0.01	0.17	-92%
	Qingdao LNG	-	-	0.50	0.50	0.48	4%
	Shanghai (Yangshan) LNG	0.06	-	0.16	0.22	0.36	-38%
	Shanghai Peak-Shaving	-	-	0.12	0.12	0.12	0%
	Tianjin LNG	-	-	0.26	0.26	0.25	4%
	Zhejiang LNG	-	-	0.14	0.14	0.23	-39%
	Zhuhai LNG	-	-	0.07	0.07	0.39	-83%
	Zhoushan LNG	-	-	0.06	0.06	0.06	-0.03
	Shenzhen Peak-Shaving	-	-	0.03	0.03	0.02	0.14
	Tianjin - Nangang LNG	0.13	-	0.28	0.41	0.74	-0.44
	Shenzhen Diefu LNG	-	-	0.06	0.06	0.20	-0.70
India	Cochin	-	0.14	-	0.14	0.07	84%
	Dabhol	0.07	0.16	-	0.23	0.35	-35%
	Dahej	0.44	1.05	0.07	1.56	1.29	21%
	Ennore LNG	0.13	-	-	0.13	-	-
	Hazira	0.14	0.22	0.06	0.41	0.37	13%
	Mundra LNG	-	0.06	-	0.06	0.07	-7%
Indonesia	Arun Conversion	-	-	0.07	0.07	0.06	15%
	Benoa LNG	-	-	0.01	0.01	0.02	-68%
	Lampung LNG	-	-	-	-	-	-
	West Java FSRU	-	-	0.12	0.12	0.15	-20%
Japan	Chita	0.23	-	0.43	0.65	0.47	39%
	Fukuoka	-	-	-	-	-	-
	Futtsu	0.07	0.29	0.46	0.83	0.94	-12%
	Hachinohe	-	-	0.06	0.06	-	-
	Hatsukaichi	-	-	0.03	0.03	0.03	0%
	Hibiki LNG	-	-	0.06	0.06	0.05	12%
	Higashi-Ogishima	-	0.12	0.53	0.64	0.59	8%
	Himeji	0.12	0.09	0.41	0.63	0.64	-2%
	Hitachi LNG	-	-	0.11	0.11	0.17	-35%
	Ishikari LNG	-	-	0.11	0.11	0.11	-2%
	Joetsu LNG	0.08	-	0.12	0.20	0.27	-26%
	Kagoshima	-	-	-	-	0.06	-
	Kawagoe	-	0.27	0.17	0.44	0.27	62%
	Matsuyama LNG	-	-	-	-	-	-
	Mizushima	-	-	0.06	0.06	0.13	-58%
	Nakagusuku LNG	-	-	-	-	-	-
	Nagasaki LNG	-	-	0.01	0.01	0.01	0%
	Negishi	0.07	0.12	0.17	0.36	0.29	24%
	Niigata	0.12	0.06	0.17	0.35	0.29	19%
	Ogishima	0.07	-	0.19	0.26	0.39	-34%
	Oita	-	-	0.06	0.06	0.07	-4%
	Sakai	-	-	0.34	0.34	0.19	74%
	Sakaide	-	-	0.06	0.06	0.06	0%
	Senboku	-	0.12	0.37	0.50	0.48	3%

	Shin Sendai	-	-	0.14	0.14	0.17	-22%
	Sodegaura	-	0.12	0.56	0.68	0.81	-17%
	Sodeshi Shimizu	-	0.09	-	0.09	0.13	-30%
	Soma LNG	-	-	-	-	-	-
	Takamatsu LNG	-	-	-	-	-	-
	Tobata Ward	-	-	0.06	0.06	0.05	35%
	Toyama LNG	-	-	0.06	0.06	0.06	0%
	Yanai	-	0.06	0.06	0.12	0.12	-1%
	Yokkaichi	-	-	0.19	0.19	0.24	-23%
	Shinsendai Power Plant	-	-	-	-	-	-
Malaysia	Pengerang LNG	-	-	0.10	0.10	0.17	-42%
	Sungai Udang FSRU	-	-	0.05	0.05	0.07	-29%
Mexico	Energia Costa Azul	-	-	-	-	-	-
	Manzanillo	0.14	-	-	0.14	0.15	-7%
Singapore	Singapore LNG	0.11	0.07	0.13	0.31	0.15	115%
South Korea	Boryeong	0.08	-	0.32	0.39	0.31	28%
	Gwangyang	0.13	-	0.32	0.46	0.25	81%
	Incheon	0.21	0.63	0.44	1.28	1.67	-23%
	Pyeongtaek	0.26	0.34	0.65	1.25	1.33	-6%
	Samcheok	-	0.06	0.26	0.32	0.27	20%
	Tongyeong	0.21	0.18	0.19	0.58	0.63	-8%
Taiwan	Taichung	0.06	0.43	0.12	0.62	0.43	43%
	Yung-An	0.06	-	0.87	0.94	0.80	17%
Thailand	Map Ta Phut LNG	-	0.28	0.20	0.48	0.46	5%
Total		3.39	5.95	11.35	20.70	22.19	-7%

Source: LNG Journal

Atlantic Imports

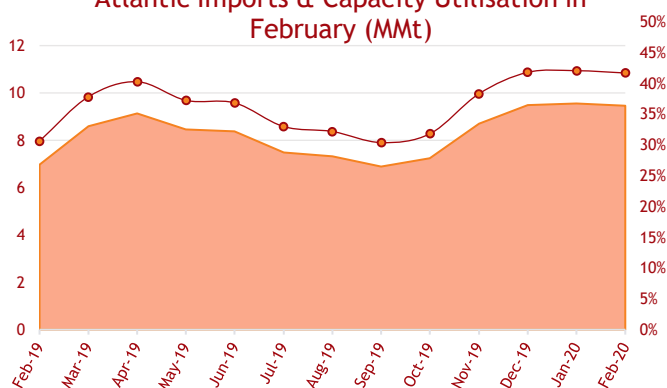
Overall offtakes decreased only slightly as lower European demand is almost offset by Caribbean and S. America

Atlantic imports decreased slightly by 0.09mmt (-1%) month-on-month in February as key European buyers such as the United Kingdom, Spain and the Netherlands slashed monthly offtakes by 1.04mmt overall in February. Meanwhile, overall capacity utilisation remained steady at 42%. The UK saw the most drastic monthly import reduction at 0.46mmt (-26.5%). However, we highlight that change was seasonal and should not detract from the overall year-on-year LNG import growth of 0.49mmt (62.9%) for the country. The case is different for Spain and the Netherlands. Although

Spain also saw year-on-year import growth of 0.31mmt (34.7%), its monthly imports fell not in line with seasonality by 0.37mmt (-23.4%) to 1.21mmt in February. The Netherlands curtailed monthly offtakes drastically by 0.21mmt (-30.1%) whilst also reducing imports slightly by 0.02mmt (-4.3%) on a year-on-year basis. Other European importers led by Belgium and Turkey drastically increased offtakes by 1.01mmt overall in February. However, we highlight more than 70% of LNG deliveries to Zeebrugge were shipped from Yamal LNG and we therefore expect a significant proportion of those volumes to be bunkered for subsequent re-exports. Based on that assumption it would be Turkey that saw the most significant demand growth by importing 0.26mmt (16.4%) more month-on-month in February.

In the Atlantic Basin's western part, the Caribbean and South America saw robust net demand growth of close to 0.40mmt month-on-month led by FSRU terminals in Brazil with 0.22mmt. Concurrently, Jamaica, Panama, the Dominican Republic and Colombia increased offtakes by 0.18mmt overall, equating to roughly one cargo each. The overall regional growth was tempered by a 0.11mmt demand reduction seen at the Everett Marine terminal in Boston in the United States as well as a decrease of 0.01mmt (-11.6%) in Puerto Rico. Notably, the latter could play a much stronger role in Caribbean LNG demand if had access to relatively cheap U.S. LNG. However, the Jones Act prohibits non-US flagged or crewed vessels from servicing domestic trade routes, including unincorporated U.S. territory. There are currently no U.S.-flagged LNGCs in active service ♦

Atlantic Imports & Capacity Utilisation in February (MMT)



Source: LNG Journal

Table: Monthly Atlantic Basin Imports Compared

Country	Plant	Export Basin			February	January	% Change m/m
		Atlantic	Middle East	Pacific			
Argentina	GNL Escobar GasPort	—	—	—	—	—	—
Belgium	Zeebrugge	0.78	0.09	—	0.87	0.53	63%
Brazil	Bahia de Guanabara FSRU	—	—	—	—	—	—
	Bahia de Todos FSRU	0.12	—	—	0.12	—	—
	Port Pecem FSRU	0.08	—	—	0.08	0.03	222%
	Porto de Sergipe FSRU	0.04	—	—	0.04	—	—
Canada	Canaport LNG	—	—	—	—	0.26	—
Colombia	SPEC LNG	0.07	—	—	0.07	0.03	153%
Dominican Republic	Andres LNG	0.12	—	—	0.12	0.10	14%
France	Dunkerque Le Clipton	0.27	—	—	0.27	0.32	-14%
	Fos-sur-Mer	0.49	—	—	0.49	0.35	39%
	Montoir-de-Bretagne	0.51	—	—	0.51	0.37	40%
Greece	Revithoussa	0.19	0.13	—	0.32	0.29	11%
Italy	Panigaglia	0.09	—	—	0.09	0.10	-11%
	Rovigo Adriatic LNG	—	0.42	—	0.42	0.38	11%
	Toscana Terminal	0.19	—	—	0.19	0.27	-28%
	Montego Bay	0.05	—	—	0.05	—	—
Jamaica	Port Esquivel FSU	—	—	—	—	—	—
Lithuania	Klaipeda LNG	0.12	—	—	0.12	0.06	106%
Malta	Delimara LNG	0.03	—	—	0.03	—	—
Mexico	Altamira LNG	—	—	—	—	—	—
Netherlands	Maasvlakte Gate Terminal	0.49	—	—	0.49	0.70	-30%
Panama	AES Costa Norte LNG	0.07	—	—	0.07	—	—
Poland	Swinoujscie LNG	0.12	0.09	—	0.21	0.25	-14%
Portugal	Sines	0.28	0.14	—	0.42	0.37	15%
Puerto Rico	Penuelas	0.05	—	—	0.05	0.06	-12%
Spain	Bahia de Bizkaia LNG	0.38	—	—	0.38	0.46	-19%
	Barcelona	0.18	0.06	—	0.24	0.38	-36%
	Cartagena	0.24	—	—	0.24	0.26	-8%
	Huelva	0.35	—	—	0.35	0.34	2%
	Mugardos	—	—	—	—	0.13	—
	Sagunto	—	—	—	—	—	—
Turkey	ETKI LNG	0.23	—	—	0.23	0.19	24%
	Izmir	0.47	0.16	—	0.63	0.54	16%
	Marmara Ereglisi	0.42	0.28	—	0.70	0.63	10%
	Iskenderun FSRU	0.29	—	—	0.29	0.22	28%
United Kingdom	Dragon LNG	0.26	0.07	—	0.33	0.32	5%
	Isle of Grain	0.44	—	—	0.44	0.55	-21%
	South Hook LNG	0.22	0.29	—	0.52	0.88	-41%
United States	Everett Marine Terminal	0.09	—	—	0.09	0.19	-55%
Total		7.73	1.74	0.00	9.47	9.55	-1%

Source: LNG Journal

Middle Eastern Imports

Steady demand in February primarily supported by Pakistan

Middle Eastern LNG demand has remained broadly steady at 0.63mmt since January following seasonal demand shifts throughout the Basin in November and December. The region saw only

sporadic demand outside Pakistan, which imported 0.51mmt in February, down 0.11mmt (-18%) month-on-month. There was only limited additional demand in Israel and Kuwait, which both imported

one cargo each after having been absent from the market in January. Middle Eastern import capacity utilisation thus stood at 21% in February, broadly flat m/m. However, the Basin also showed

lower utilisation of 5pp on a year-on-year basis, as y/y imports fell by 0.14mmt. Still, our data indicates that the region will see m/m demand growth again in March ♦

FSRU/FSU

FSRU capacity utilisation continued on growth trajectory

The utilisation of FSRU capacity has continued on its recovery trajectory, growing by 7.3% year-on-year after having plummeted in the run-up to December. Not only did a significant proportion of Middle Eastern capacity into off-season shut-in, domestic gas production growth in Egypt and Argentina's also reached a level where EGAS and YPF could mostly forego LNG imports in 2H 2019.

However, month-on-month utilisation in the Pacific still decreased by 0.08mmt in February, pegging regional FSRU capacity utilisation at

40% as the number of cargoes arriving at an FSRU decreased from 11 to 10 shipments whilst the average journey time increased by around one day. Consequently, the volumes these deliveries contained were slightly diminished due to boiloff, on our calculation.

By contrast, FSRU capacity utilisation in the Atlantic Basin saw a significant month-on-month boost of over 10pp to 31.7% as several smaller buyers as well as Turkey increased their imports in February whilst relying to considerable extent

on FSRU/FSU facilities instead of more costly conventional onshore terminals. Additionally, Brazil's latest FSRU stationed at Port Sergipe received its inaugural cargo via the *Singapore Energy* on 4 February. Meanwhile, Middle Eastern FSRU utilisation primarily relied on the two units installed at Pakistan's Port Qasim LNG and amounted to 21.3%, up slightly from the 20.9% seen in January ♦