argusmedia.com

LPG markets in the midst of COVID-19

Market Reporting

Consulting

Events

illuminating the markets

Argus: Independent Commodity Price Reporting Agency and more….

- One of the world's leading PRAs, Argus is a team of 900 staff members in 19 global offices
- Publishing more than 11,000 daily spot and forward price assessments, plus market intelligence for world commodities markets
- Coverage includes:
  - Energy
  - Fertilizers
  - Petrochemicals
  - Metals
- Services
  - Price reporting and indexation
  - Consulting
  - Conferences
- Indexation examples
  - US crude oil
  - US and European refined products
  - US and European natural gas
  - European and Asian LPG
  - US and European environmental markets

THE QUEEN'S AWARDS FOR ENTERPRISE

THE SUNDAY TIMES TOP TRACK 250 Grant Thornton

THE SUNDAY TIMES INTERNATIONAL TRACK 200 HSBC

INVESTORS IN PEOPLE

www.argusmedia.com

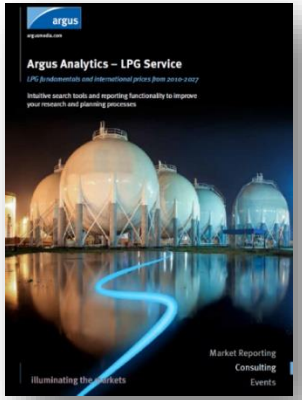
Copyright © 2018 Argus Media group. All rights reserved.

Argus LPG coverage includes price, market data, consulting

Argus International LPG

Argus LPG World

Argus LPG Outlook



Argus LPG Analytics

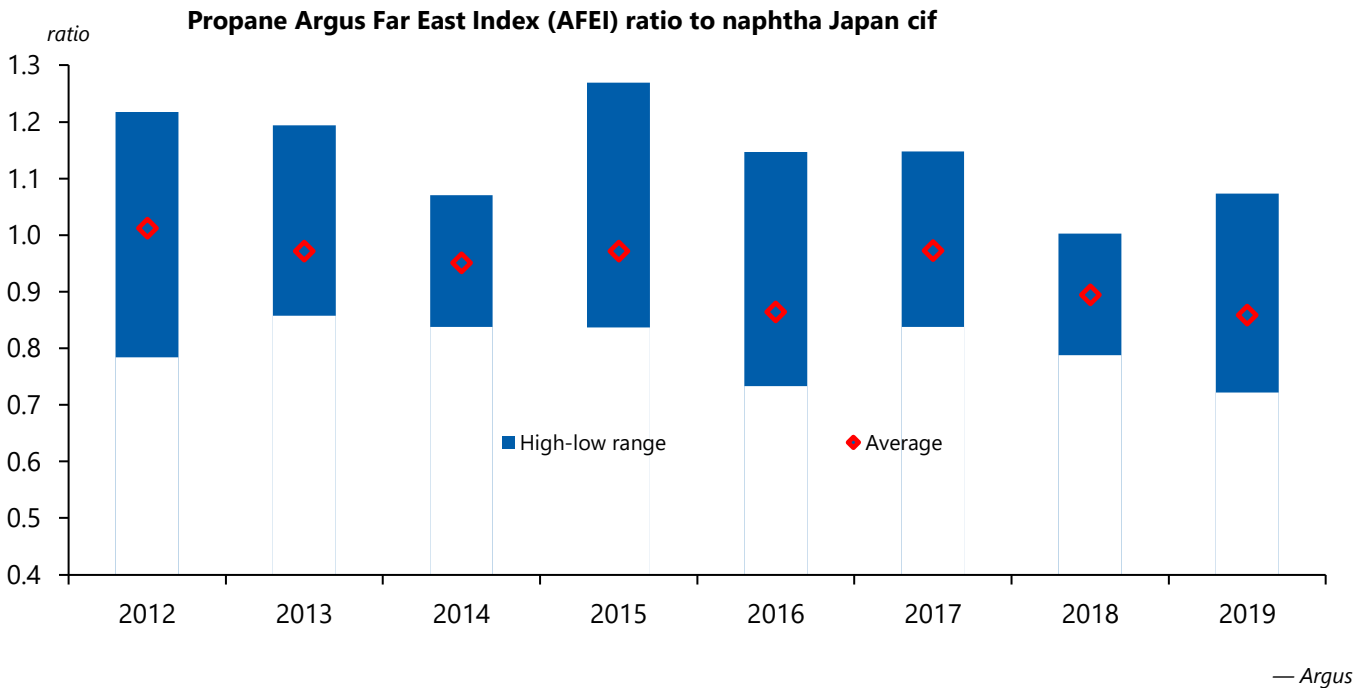
Statistical Review of Global LPG — published in partnership with WLPGA

argus

Copyright © 2020 Argus Media group. All rights reserved.

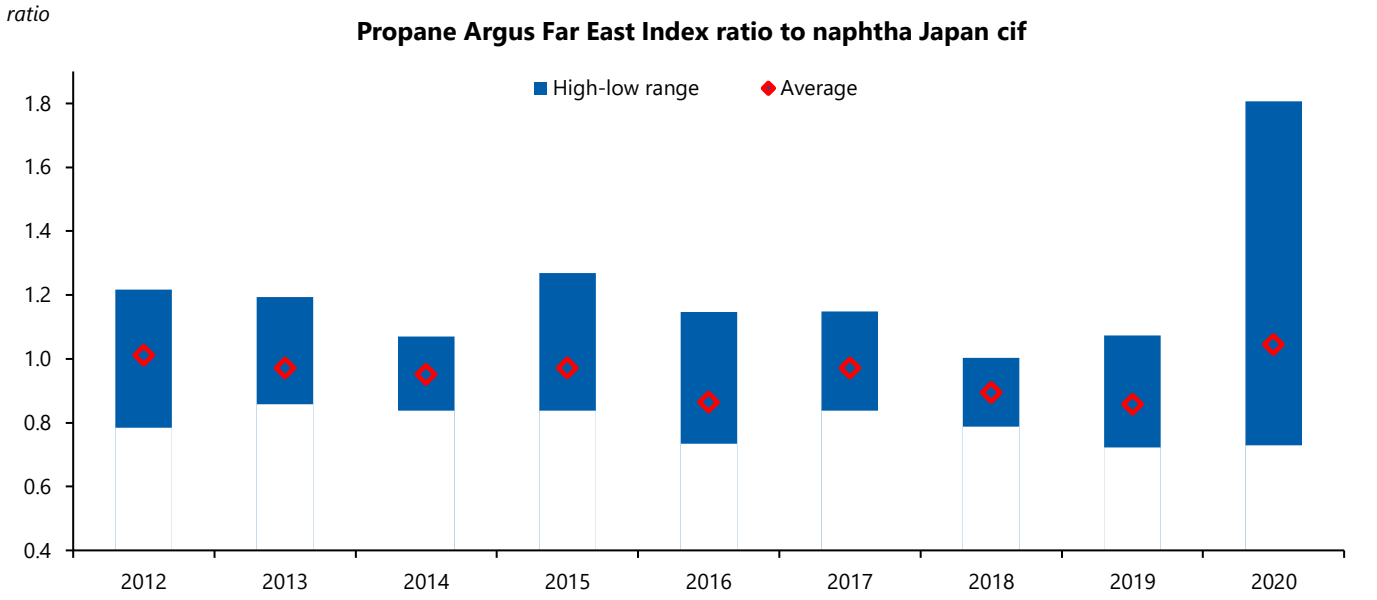
A brief recap on 2020 so far…….

2010-2019: Global LPG length weighing on prices



Copyright © 2019 Argus Media group. All rights reserved.

2020: Off the charts

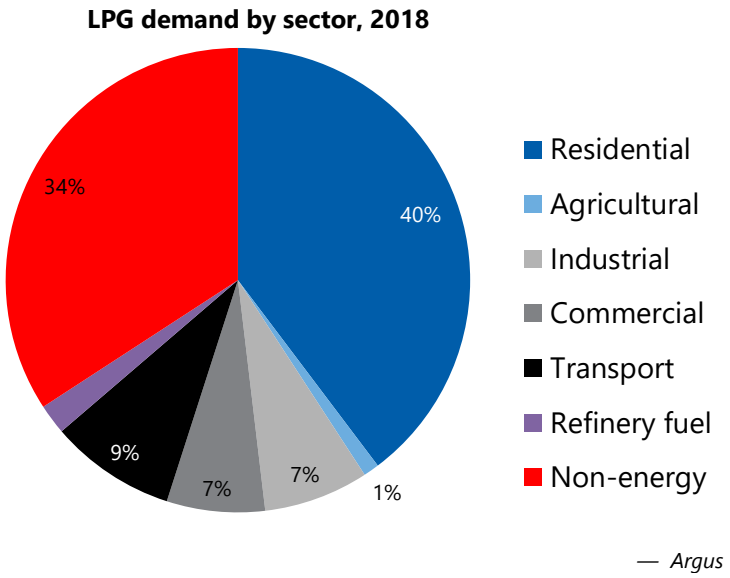


— *Argus*

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

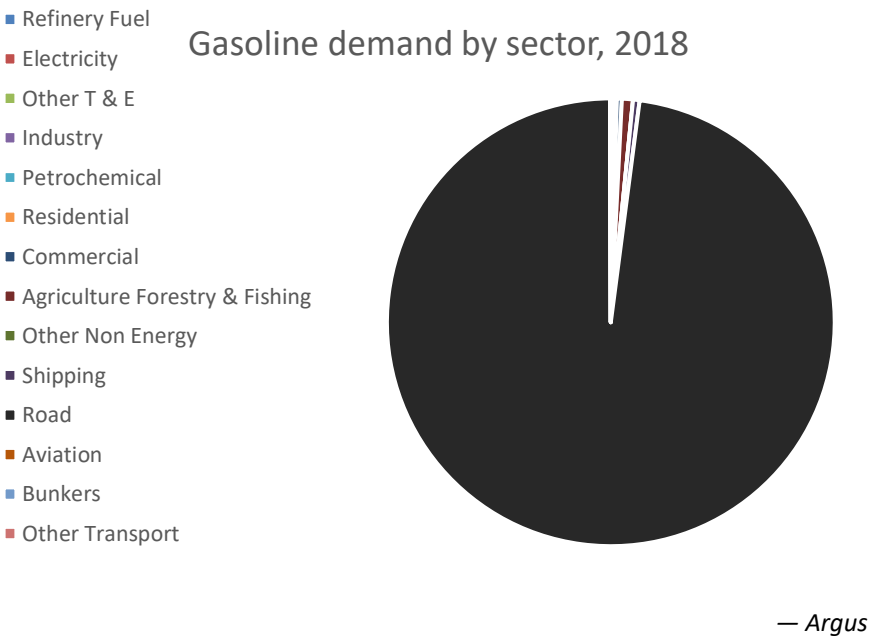
LPG is versatile – as demonstrated by its global demand profile

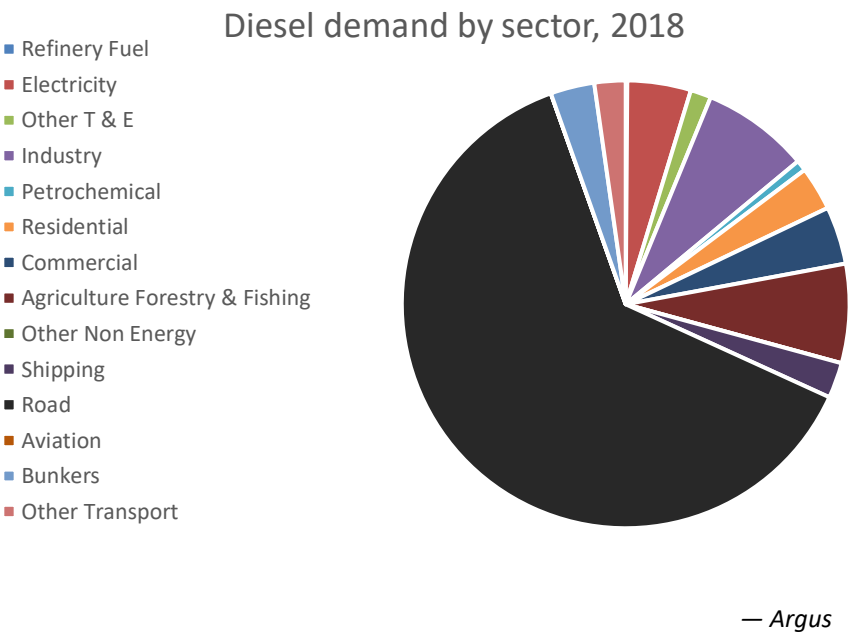


- **Residential demand** is broadly characterized as heating in cold developed countries and cooking in warm developing countries
- **Non-energy** –LPG is a key petrochemical feedstock and a component of other oil products
- **Industrial/Commercial** – use in either industrial processes in off gas-grid settings, and hotels/restaurants
- **Transport** – LPG is third most common road transport fuel globally, after gasoline and diesel
- LPG also numerous applications within these categories including power generation, aerosols, cigarette lighters, and forklift trucks.

Copyright © 2019 Argus Media group. All rights reserved.

The demand profiles of gasoline and diesel are less diverse



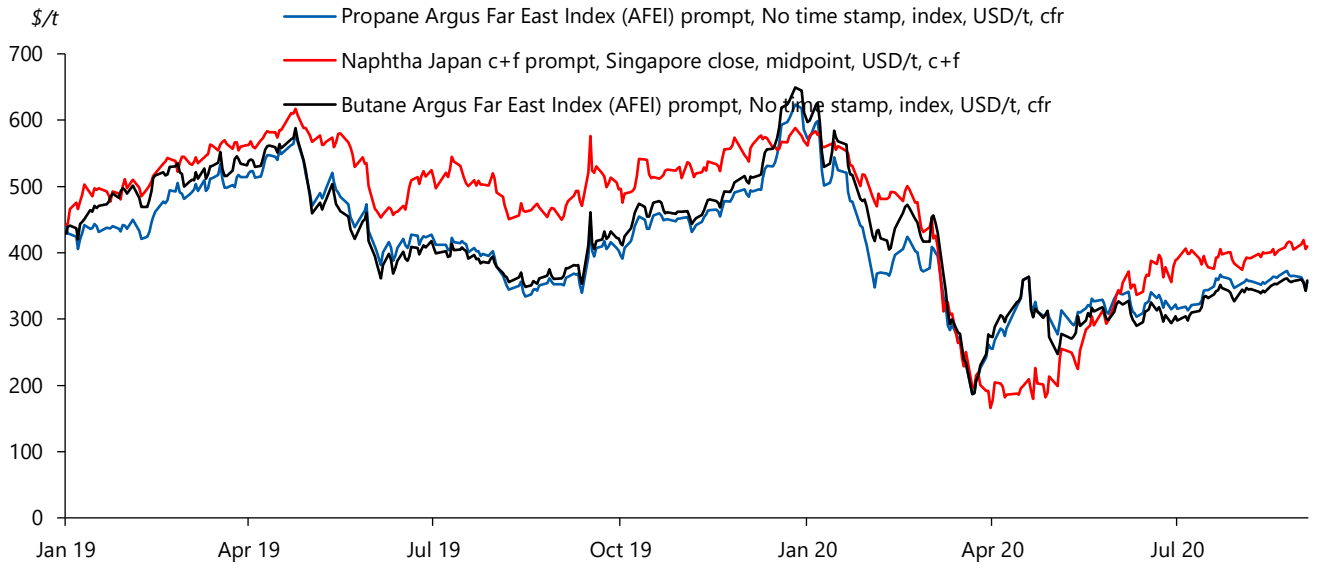


argus

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

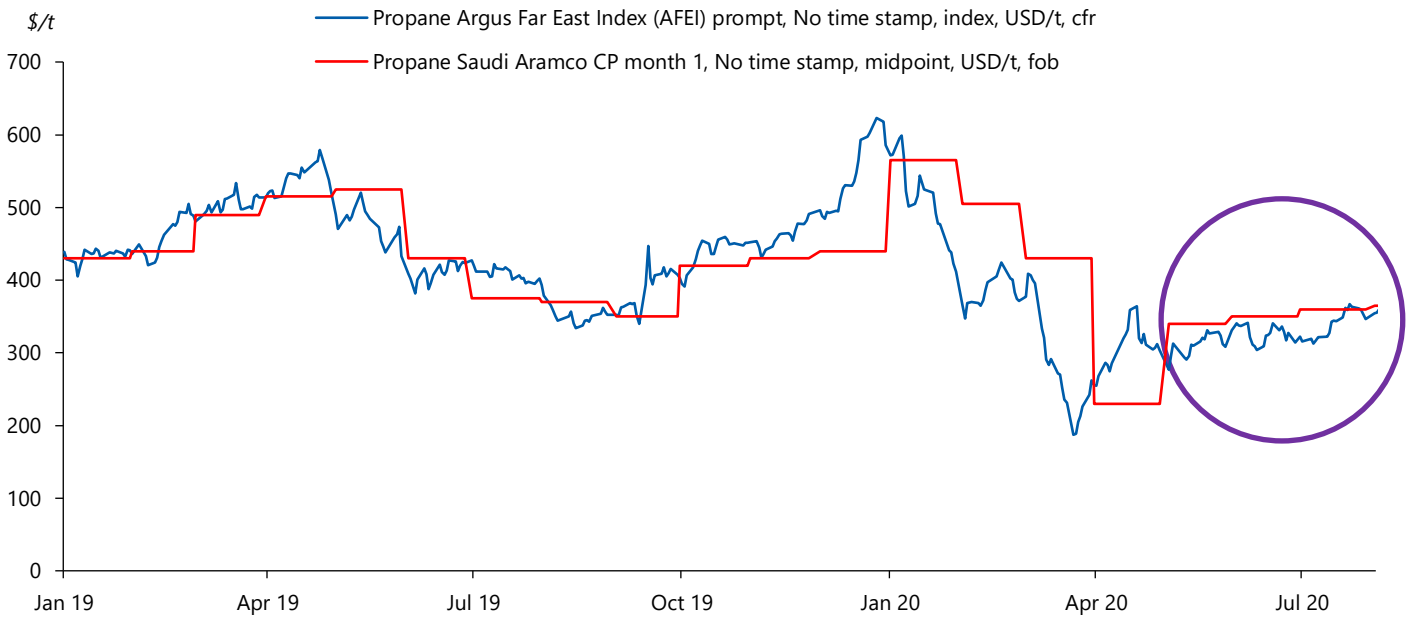
The strong LPG premium was a direct result of its demand profile



— *Argus*

Copyright © 2019 Argus Media group. All rights reserved.

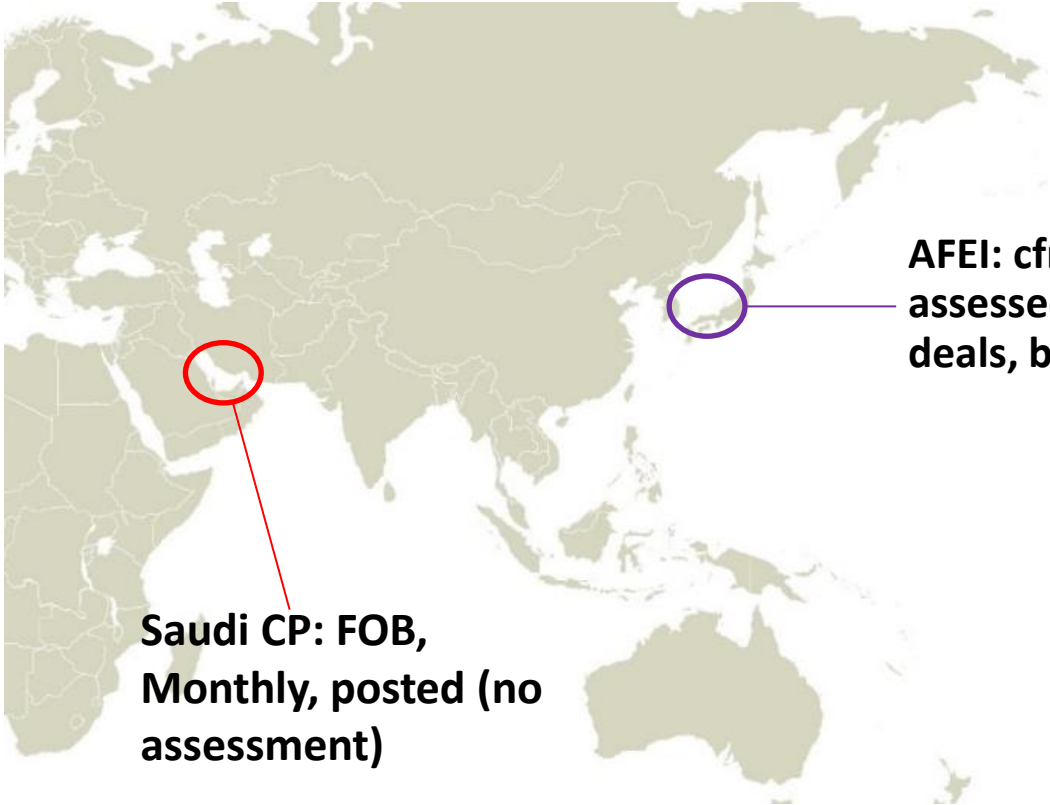
The Saudi CP has remained stubbornly high



— *Argus*

Copyright © 2019 Argus Media group. All rights reserved.

Asia has two benchmarks: Saudi CP and the Argus Far East Index (AFEI)



- AFEI has more than 20 years of history
- Is used in spot and term deals
- Has a highly liquid swaps market

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

Asia has two benchmarks: AFEI and the Saudi CP

Argus Far East Index	Saudi Aramco Contract Price
Daily	Monthly
Cfr	Fob
Assessed on deals/bids/offers	“Black box” Producer price – uses CP term customer recommendations
120mn tonnes swaps	50mn tonnes swaps

argus

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

AFEI is used as an LPG pricing basis around Asia and beyond

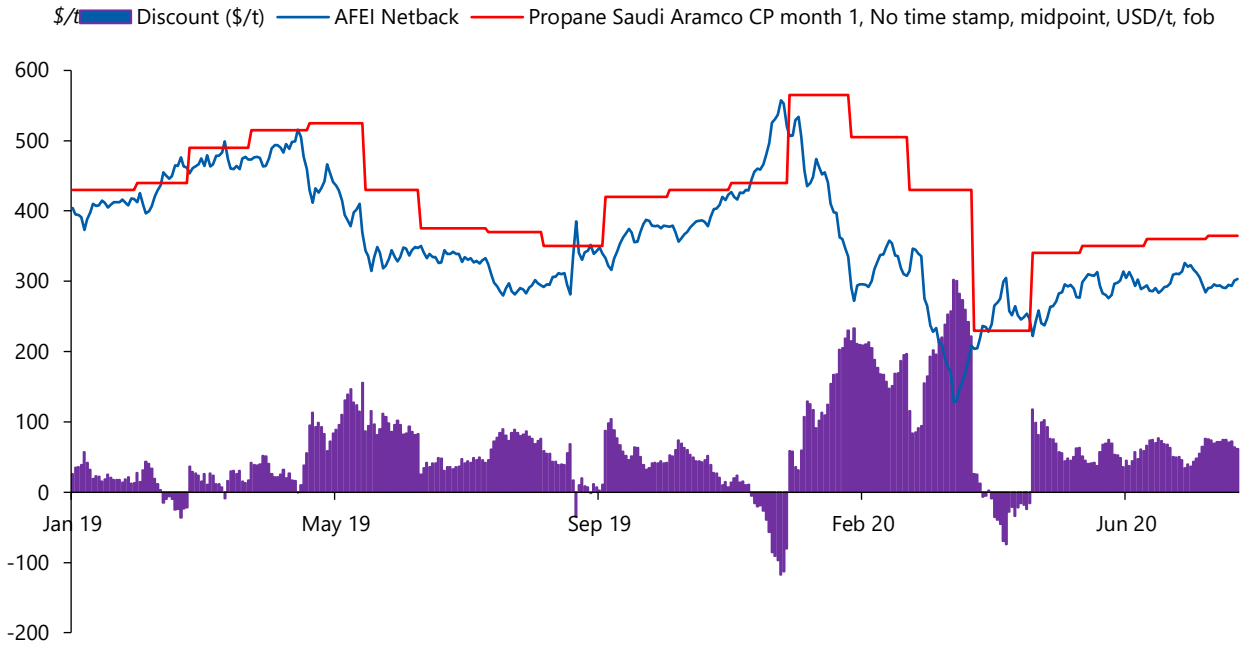
Some examples of pricing on AFEI

- AFEI has become widely widely used in recent years — for both spot and term contracts
- FEI netback is used for both Canada exports and by most producers in the Middle east.
- New production such as off-shore Australia
- Saudi Arabia uses internally for LPG sales to the petrochemical sector
- All alongside core usage in Japan, Korea, China.

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

The differing methodology results in different values



- AFEI *generally* offers value against CP

— *Argus*

Copyright © 2019 Argus Media group. All rights reserved.

CFR Bangladesh: Is it time for published price?

- Argus already provides references for other pressurized markets in the region
- These are used for both spot and term deals
- Methodology: Numerous options — assessed an actual deals, calculated cost of delivery, differentials to other locations, breakbulk points etc.
- Cfr Vietnam, South China pressurized
- South Africa LPG Index

argus
argusmedia.com

Asia-Pacific Market Bulletin
Argus *International LPG*

Issue 20-169 | Friday 4 September 2020

Pearl River Delta Index			2828.00	-68.00

11+11 Propane/Butane mix $/t

	±	Bid		Ask	±
Japan cfr	+14.00	355.00	-	359.00	+14.50
				Index	
Argus Mixed Index				**357.00**	**+14.25**

Monthly averages $/t

	Month	
Propane Argus Middle East Index	Sep	351.250
Butane Argus Middle East Index	Sep	351.000
Propane Argus Far East Index™ (AFEI™)	Sep	354.313
AFEI™ diff to M1	Sep	-30.190
Butane Argus Far East Index™ (AFEI™)	Sep	354.063
Argus Mixed Index	Sep	354.188
Propane Argus South China Index	Sep	380.750
Butane Argus South China Index	Sep	380.500
Propane Argus East China Index	Sep	372.500
Butane Argus East China Index	Sep	372.250
Pearl River Delta Index	Sep	2804.000
Argus South Africa LPG Index	Sep	445.947

Pressurised cargoes $/t

	CP basis	Timing	Propane ±	Propane Bid		Propane Ask	Propane ±	Butane ±	Butane Bid		Butane Ask	Butane ±
South China CP fob	Sep	Sep	+4	37.00	/	47.00	+4	+4	37.00	/	47.00	+4
South China fob		Sep	+4	402.00	-	412.00	+4	+4	392.00	-	402.00	+4
South China CP cfr	Sep	Sep	+4.00	67.00	/	77.00	+4.00	+4.00	67.00	/	77.00	+4.00
South China cfr		Sep	+4	432.00	-	442.00	+4	+4	422.00	-	432.00	+4
Vietnam CP cfr	Sep	Sep	+5.00	95.00	/	105.00	+5.00	+5.00	95.00	/	105.00	+5.00

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

argus

What next for LPG markets?

Copyright © 2019 Argus Media group. All rights reserved.

Key Points in the LPG Outlook going into next year

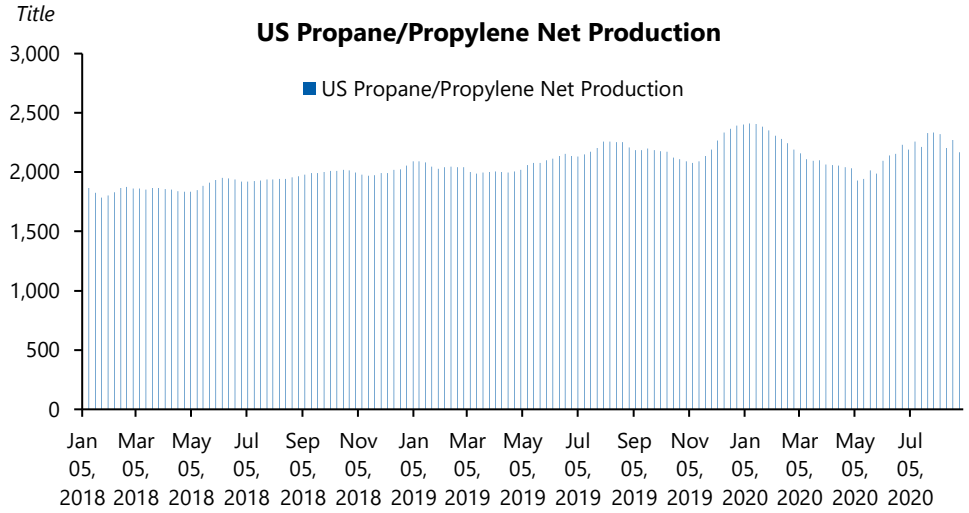
- Production growth may be curtailed but the market is well-covered until Q4. Localized shortages could return if lockdowns are reimposed. Opec+ to continue to balance the market.

- Some infrastructure and demand side projects may be delayed or cancelled.

- LPG demand will remain less affected by COVID-19 than other oil products (LPG is somewhat “COVID Proof”).

- Slow rising crude will result on a similar price trend in LPG – with seasonality likely to come into play.

Key data point: US Production

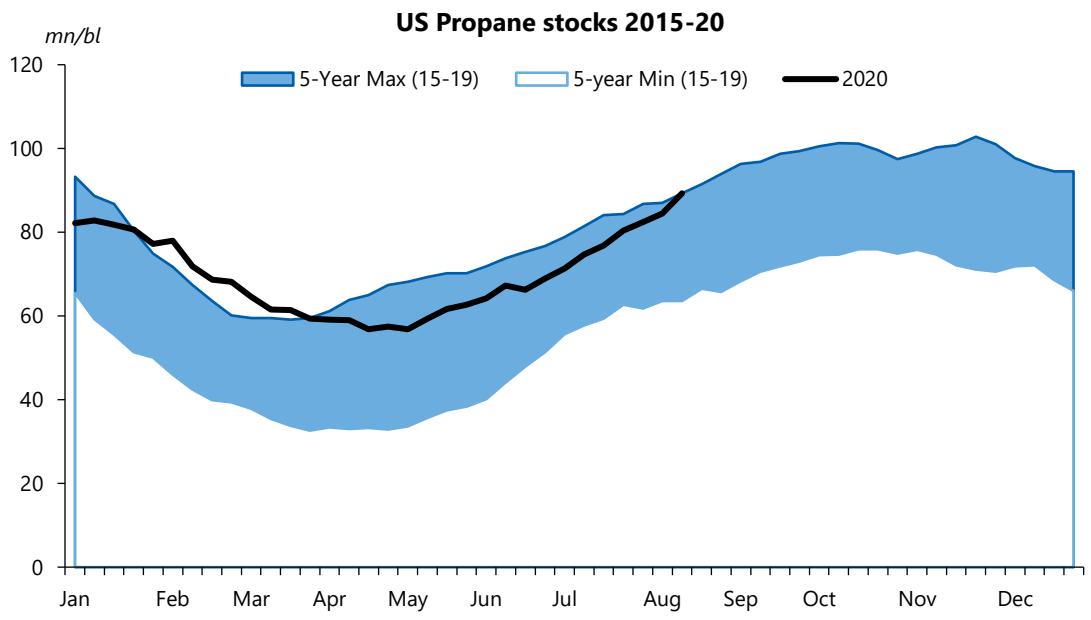


- Production rally has buoyed supply
- Key period will be Q4 2020.
- Prevailing crude pricing is sustaining volumes

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

Market remains covered by high stocks



— *EIA;Argus*

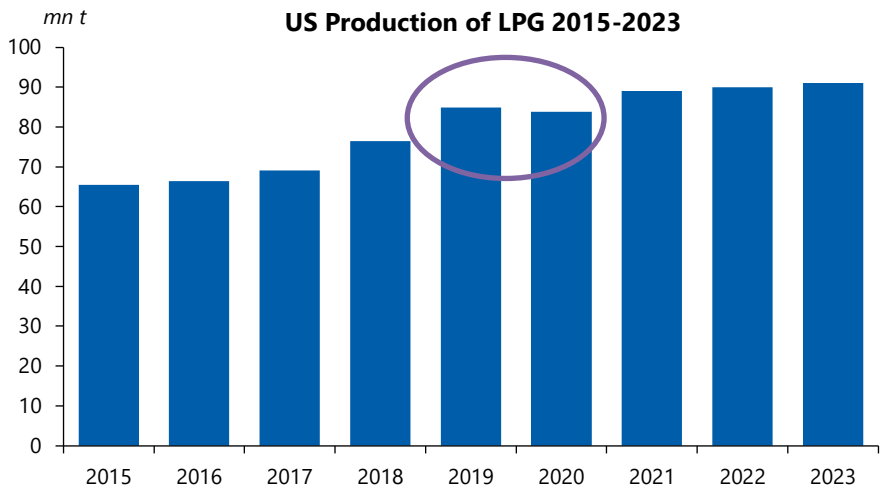
- Historically high stocks in Q1
- Reaching record levels in August 2020
- Q4 will be crucial— once northern hemisphere markets need product.

argus

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

US Production growth is expected to be flat to negative

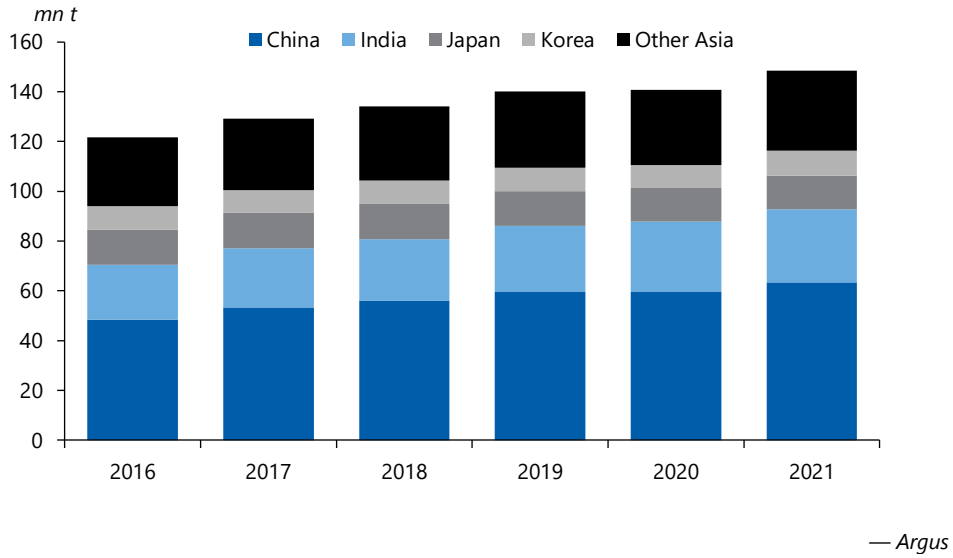


— *Argus*

- Growth in production is forecast to be negative, but not significantly so, according to our latest view.
- Firm crude sentiment has already resulted in some of the worst fears of supply shortages subsiding.

Copyright © 2019 Argus Media group. All rights reserved.

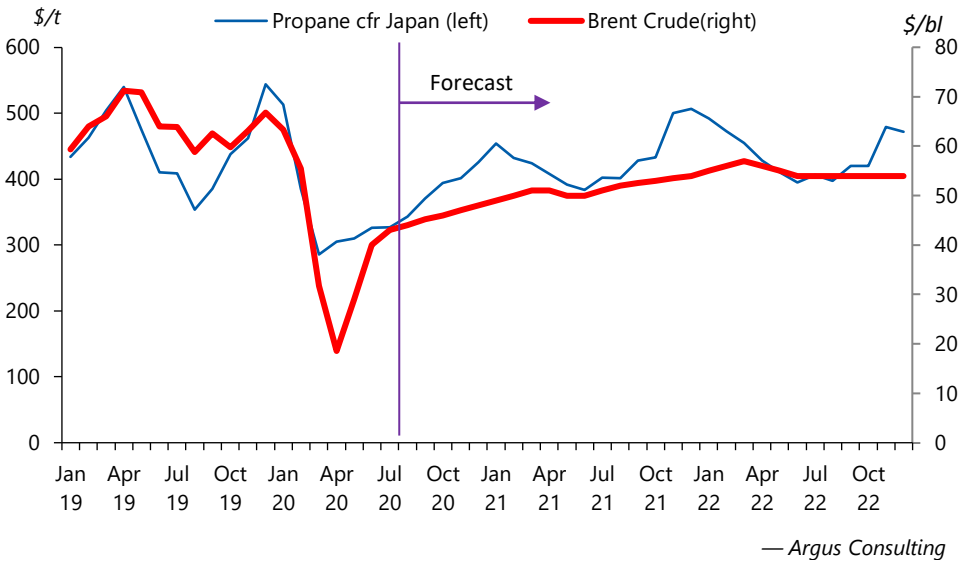
Demand from Asia is also likely to be flat in 2020



- 2020 demand is expected to be similar to 2019, with a slight dip due to reduced consumption in Q2 in particular, and somewhat curtailed growth in less developed countries.
- We currently expect a return to growth in 2021

Copyright © 2019 Argus Media group. All rights reserved.

Price recovery is underway already — though is uncertain



- Gradually rising prices are expected until year-end.
- LPG seasonality will come into play
- A lot of uncertainty remains: if crude reverses, the picture will be very different.

argus

www.argusmedia.com

Copyright © 2019 Argus Media group. All rights reserved.

argusmedia.com

Thank you very much!

david.appleton@argusmedia.com
Singapore
www.argusmedia.com

Copyright notice
Copyright © 2020 Argus Media group. All rights reserved. All intellectual property rights in this presentation and the information herein are the exclusive property of Argus and and/or its licensors and may only be used under licence from Argus. Without limiting the foregoing, you will not copy or reproduce any part of its contents (including, but not limited to, single prices or any other individual items of data) in any form or for any purpose whatsoever without the prior written consent of Argus.

Trademark notice
ARGUS, the ARGUS logo, Argus publication titles, and Argus index names are trademarks of Argus Media Limited. For additional information, including details of our other trademarks, visit argusmedia.com/trademarks.