

# Off to the Races: Natural Gas Supply Versus Demand in 2021-22

---

9 September 2021

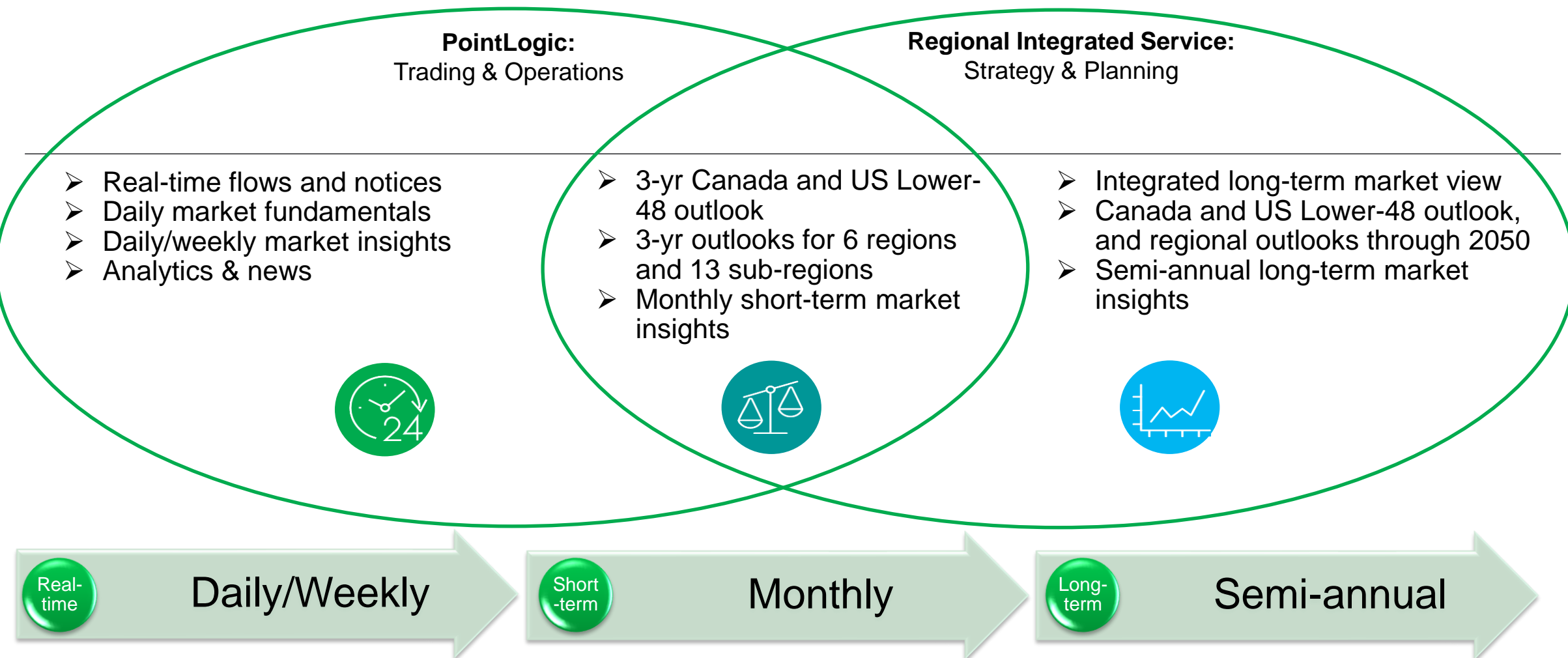
**Bob Tomarelli**, Associate Director, [Robert.Tomarelli@ihsmarkit.com](mailto:Robert.Tomarelli@ihsmarkit.com) +1 215 789 7458



# Disclaimer

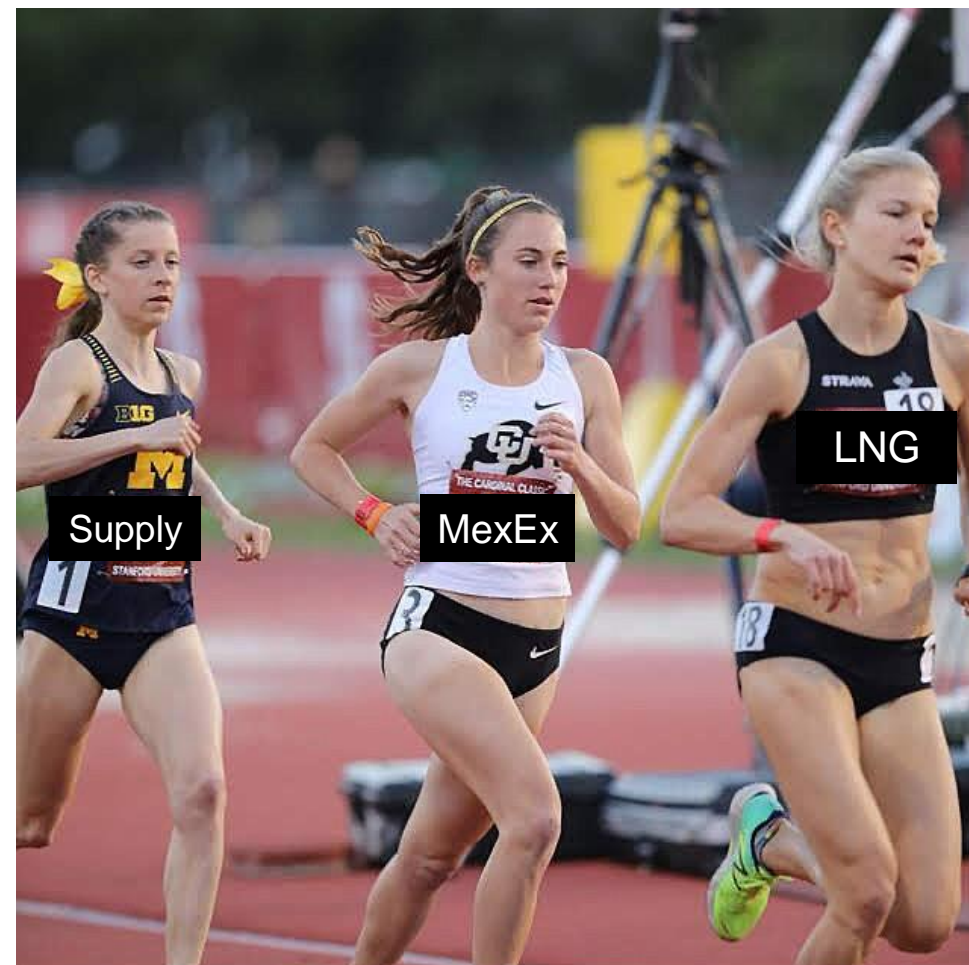
- The information contained in this presentation is confidential. Any unauthorized use, disclosure, reproduction, or dissemination, in full or in part, in any media or by any means, without the prior written permission of IHS Markit or any of its affiliates ("IHS Markit") is strictly prohibited. IHS Markit owns all IHS Markit logos and trade names contained in this presentation that are subject to license. Opinions, statements, estimates, and projections in this presentation (including other media) are solely those of the individual author(s) at the time of writing and do not necessarily reflect the opinions of IHS Markit. Neither IHS Markit nor the author(s) has any obligation to update this presentation in the event that any content, opinion, statement, estimate, or projection (collectively, "information") changes or subsequently becomes inaccurate. IHS Markit makes no warranty, expressed or implied, as to the accuracy, completeness, or timeliness of any information in this presentation, and shall not in any way be liable to any recipient for any inaccuracies or omissions. Without limiting the foregoing, IHS Markit shall have no liability whatsoever to any recipient, whether in contract, in tort (including negligence), under warranty, under statute or otherwise, in respect of any loss or damage suffered by any recipient as a result of or in connection with any information provided, or any course of action determined, by it or any third party, whether or not based on any information provided. The inclusion of a link to an external website by IHS Markit should not be understood to be an endorsement of that website or the site's owners (or their products/services). IHS Markit is not responsible for either the content or output of external websites.
- Copyright © 2021, IHS Markit®. All rights reserved and all intellectual property rights are retained by IHS Markit.

# North America Regional Integrated and PointLogic Services: Consistent and integrated research and forecasts to 2050



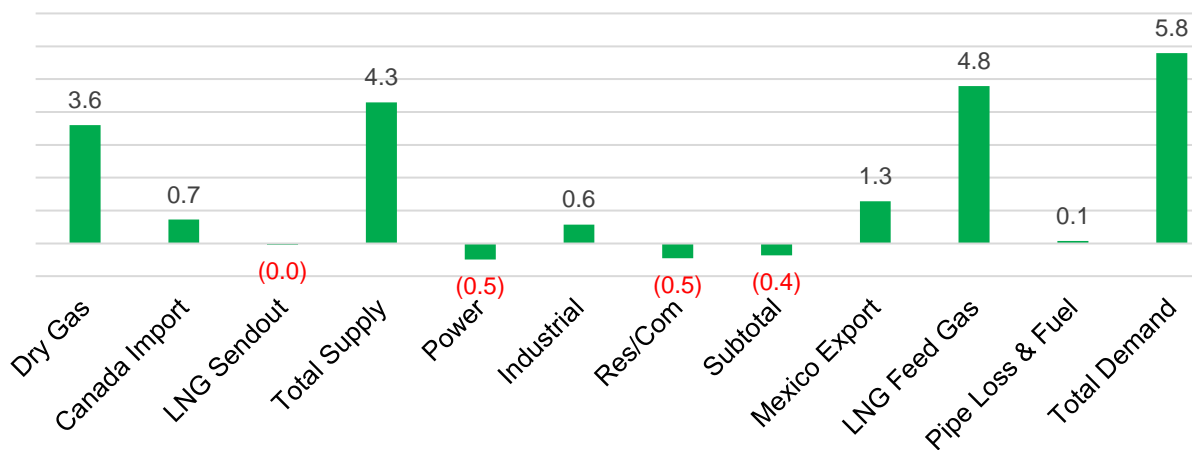
## Key Market Observations

- Producers sticking to capex guns for the most part (constrained drilling response)
- Flat gas production through 2021 (consistent at ~92 Bcf/d since January 2021)
- Global LNG market has tightened significantly (recovering Asia, Q2 European demand bump)
- Steady domestic demand and surge in Mexican exports (backstops swift pace of demand recovery in relation to supply)
- Price whiplash from sub \$2 in 2020 to supra \$3 in 2021 (upside risk and slower paced storage injections)



# On your mark, get set, go.

Delta Summer 2021 to-date vs. Summer 2020 to-date

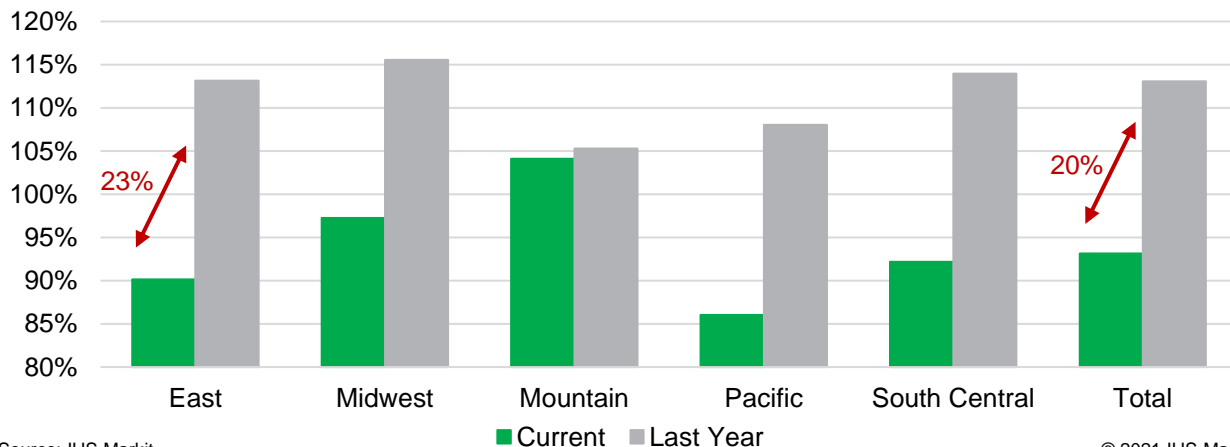


Source: IHS Markit

© 2021 IHS Markit

- **The export market has eclipsed its prior month record in 10 of the past 11 months.** Currently averaging a blistering 17.0 Bcf/d over the past 5 months.
- **US lower-48 storage continues deficit against lagging five-year average and previous year inventories.** Below average injections expected to continue in coming weeks.
- **Significant deficits to the 5-year by region are rampant in every region except the Mountain.** The East leads with a 23% delta to last year, with the L48 in total down 20%.
- 2021 summer to date cooling degree days rank third lowest of the past 10 years. **June was a scorcher – 2<sup>nd</sup> most CDDs on record.**

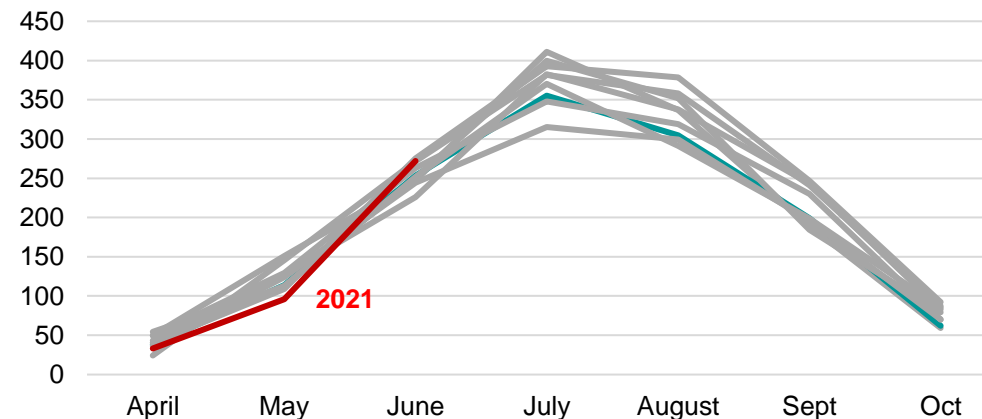
Storage Inventories as % of 5 Year Average



Source: IHS Markit

© 2021 IHS Markit

Cooling Degree Days US Summers



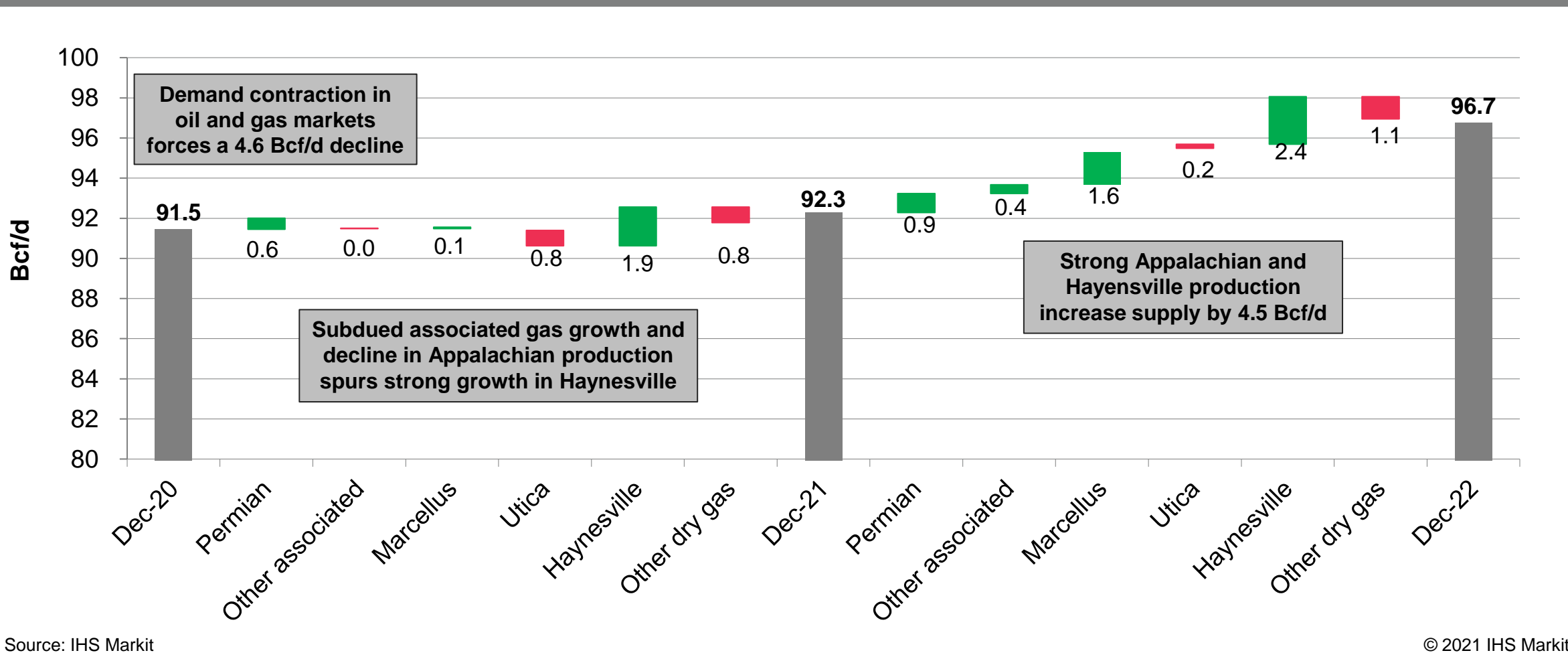
Source: IHS Markit

© 2021 IHS Markit

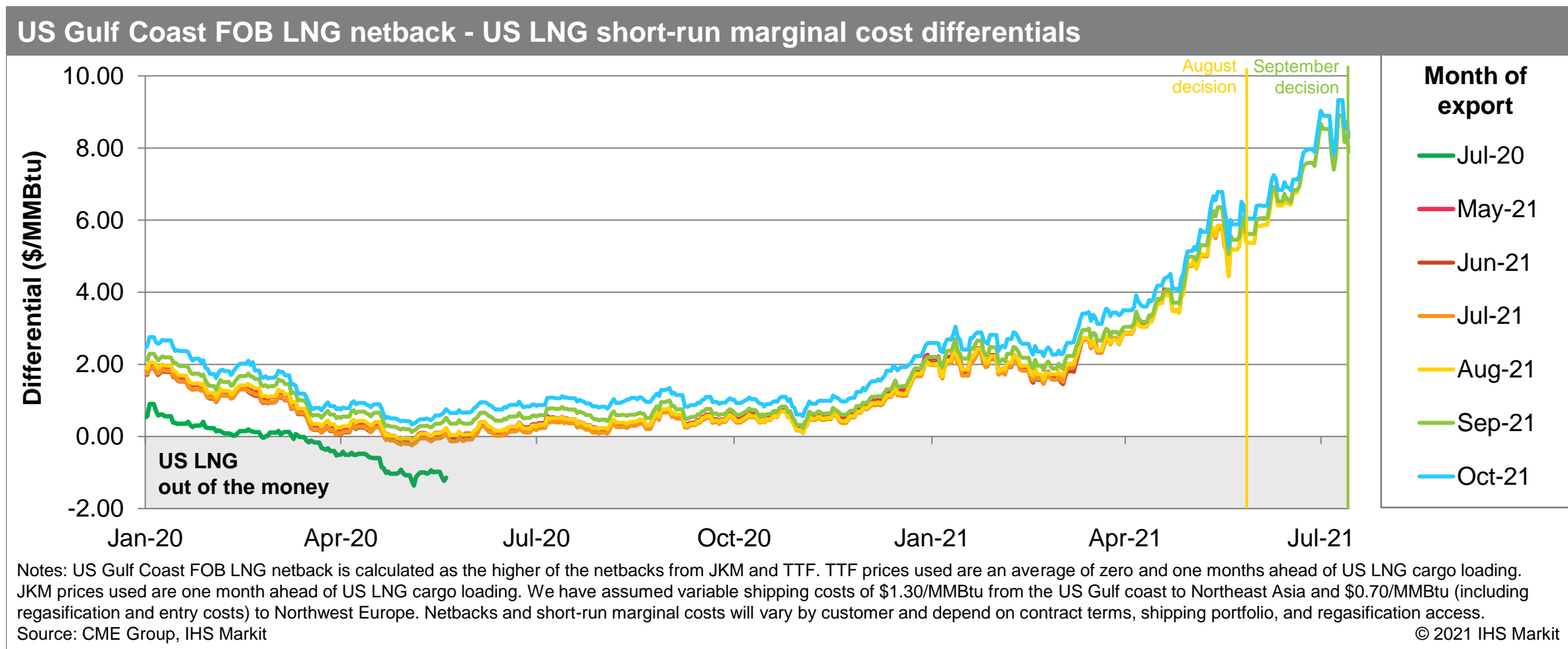
# Haynesville and Marcellus are the marginal supply

Balance sheet repair consumes large portion of cash flow and hedging limits impact of price moves

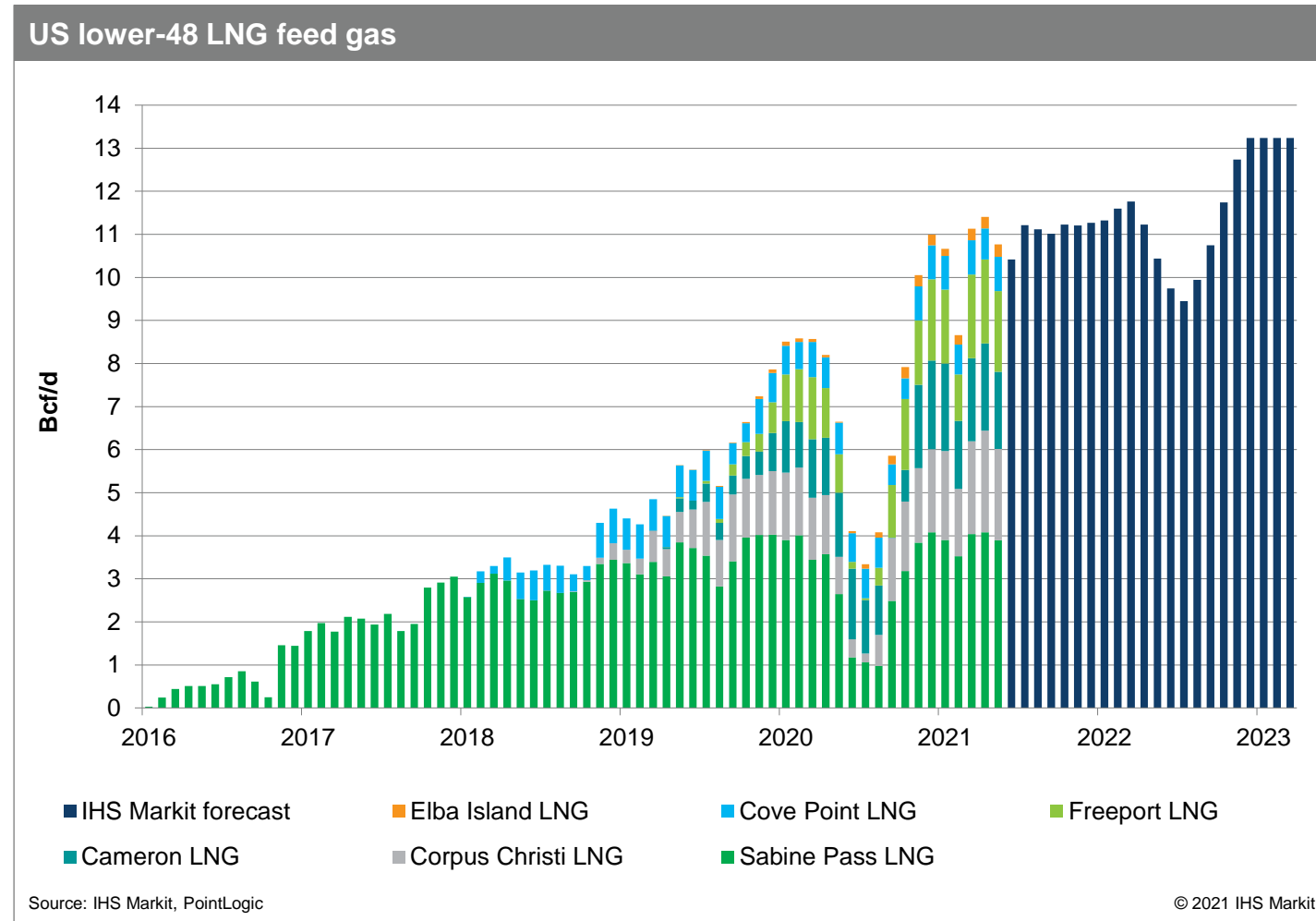
## US lower-48 natural gas production forecast by play



# Strong Asian Demand and a Bump in European Consumption Lead to Continued Health in Forward Netbacks



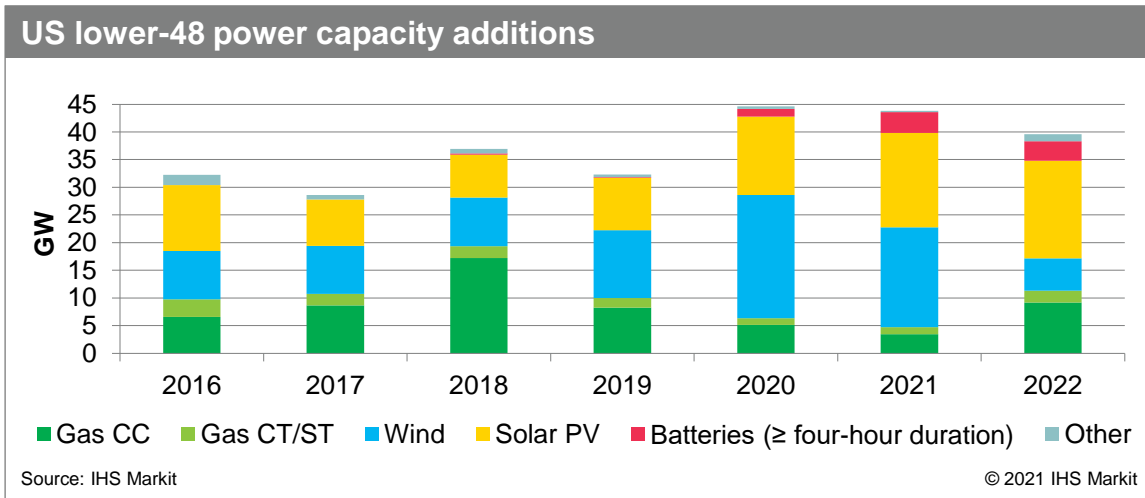
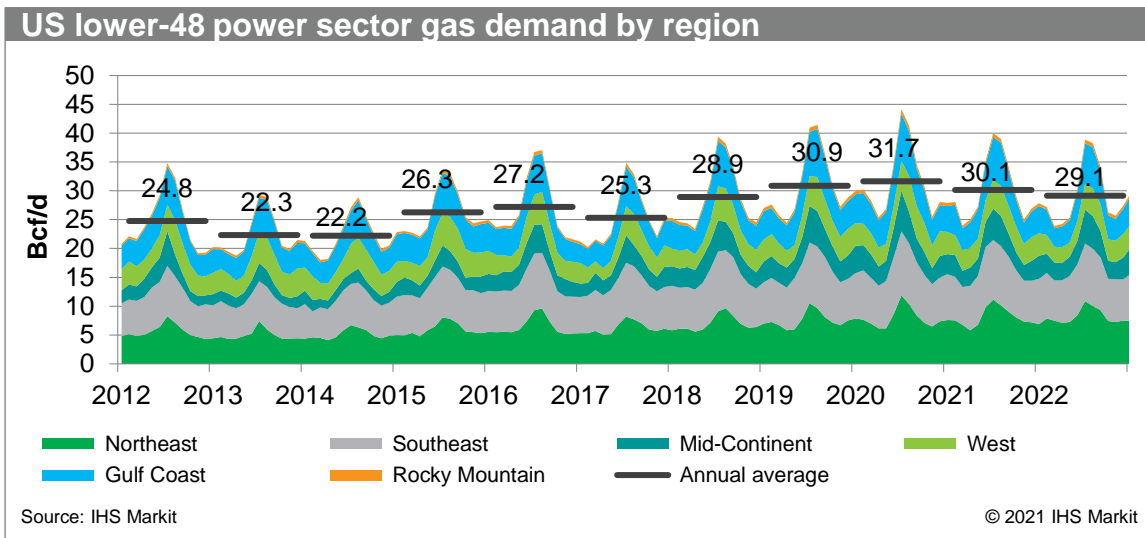
# US LNG exports should hold stable during late summer thanks to tight global LNG market fundamentals



- **Tighter global LNG market fundamentals** are made up of higher demand from Asian markets (owing partly to a stronger GDP outlook for mainland China) and Latin America (weaker hydro-electric power) along with a bump in Q2 European demand.
- **US LNG exports bounced back in July after maintenance lowered feed gas for exports in June.** Feed gas volumes returned to 10.7 Bcf/d, almost twice the previous July record of 6.0 Bcf/d
- **We expect monthly feed gas demand for exports to hold approximately flat, at about 11 Bcf/d, during the third quarter of 2021,** with any supply surplus too minor to cause a price collapse or induce shut-ins.



# Renewable capacity growth limits 2021 power sector demand



- US power sector demand is expected to fall in 2021 as prices rise above \$3.00/MMBtu.
- Power sector gas burns likely peaked in 2020 at 31.7 Bcf/d as renewable generation continues to expand.
- Power demand will become more-peaky (i.e Texas) with larger seasonal variation. The swing between the shoulder months and summers will be especially pronounced.
- Natural gas storage, particularly high deliverability storage, will increase in value but compete with swinging supply particularly in the Marcellus.
- The market will not need incremental storage capacity to shift volumes between seasons but may need the incremental capacity to provide deliverability.

## Storage injections can't keep pace due to heavy exports

US lower-48 summer 2021 versus 2020 natural gas supply and demand (Bcf/d)

Season	Supply				Demand				Exports			Storage Injections	Henry Hub
	Production	Imports	Other	Total	Res/Com/Ind	Power	Other	Domestic Total*	LNG Feed gas	Mexico	Total Demand		
Summer 2020	89.0	4.0	0.3	93.3	32.6	34.0	6.6	73.1	5.7	5.5	84.3	8.8	\$1.87
Summer 2021	92.3	4.5	0.4	97.2	32.7	32.8	6.4	72.0	10.9	6.3	89.2	8.1	\$2.98
Delta	3.3	0.4	0.1	3.9	0.1	(1.2)	(0.2)	(1.1)	5.2	0.7	4.8	(0.8)	\$1.11

\* Includes EIA imbalance

Source: PointLogic

© 2021 IHS Markit



Production Rebound



Power Decline

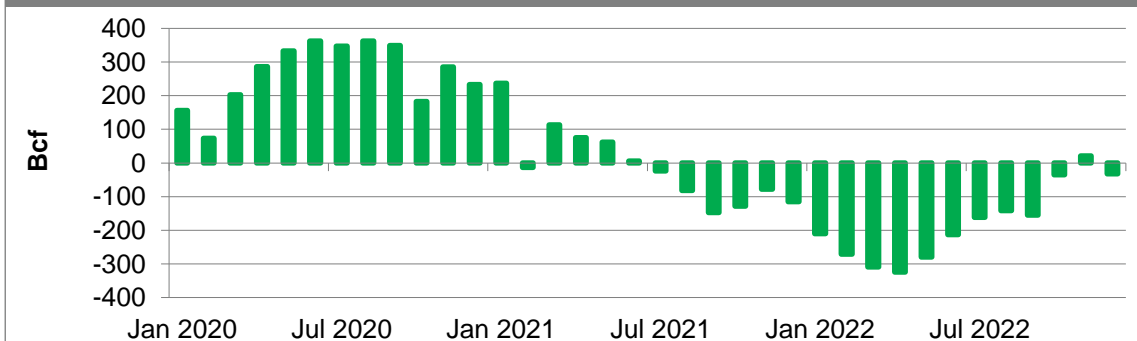


LNG & Mex Surge

# The gas inventory-to-price relationship equilibrium has shifted higher for now, and stronger associated gas production could push it lower again

- **Associated gas production is off more than 3 Bcf from December 2020 peak of 27 Bcf. Robust LNG exports, and increased need for dry gas production has increased the yield curve equilibrium price.** Higher WTI oil prices and potentially stronger-than-expected associated gas production could reverse this increase.
- **LNG feed gas demand, summer weather, and production trends are key signposts to watch as we move through 2021.**

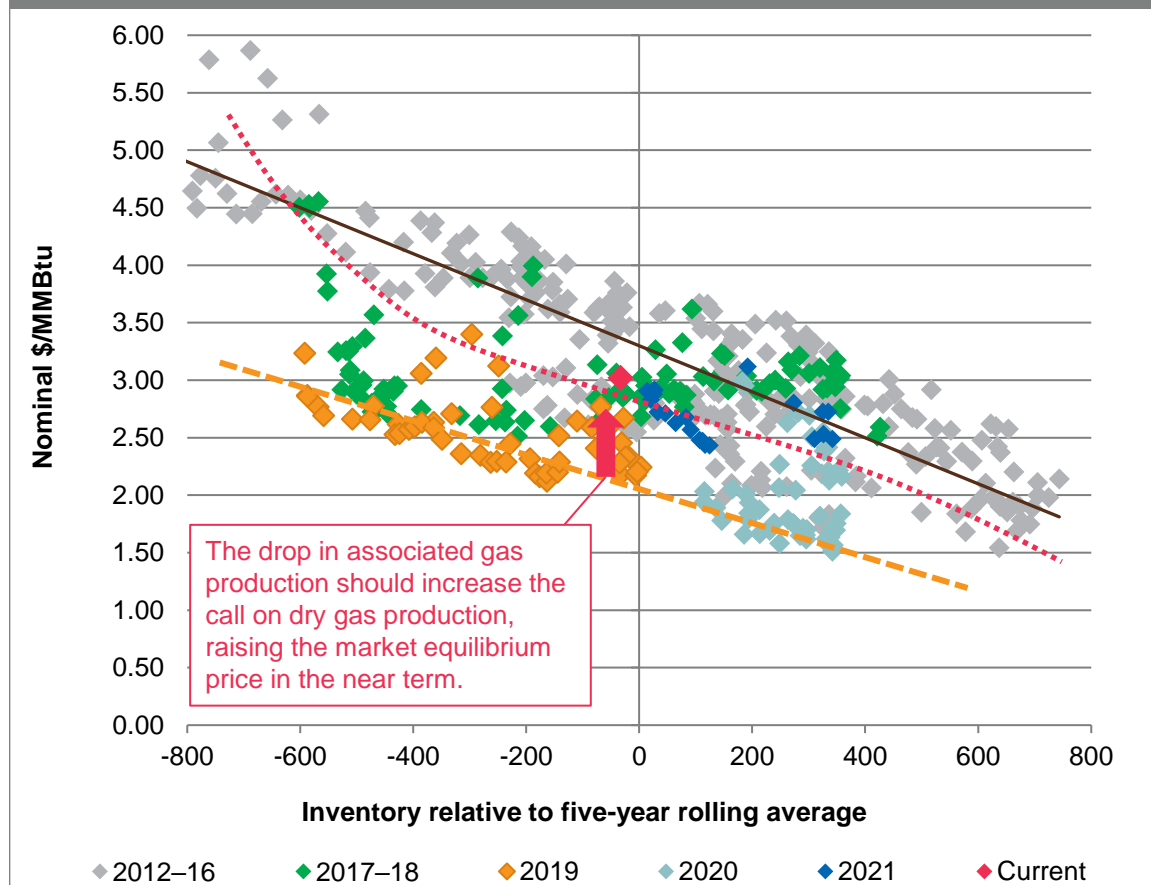
US lower-48 storage inventory relative to rolling five-year average



Source: IHS Markit, EIA

© 2021 IHS Markit

Henry Hub/storage relationship (yield curve)



Source: IHS Markit, EIA, CME Group

© 2021 IHS Markit

# Question and Answer



**Bob Tomarelli**

Robert.Tomarelli@ihsmarkit.com



## Customer Support

Phone: 855.650.4500 ext. 1  
[support@pointlogicenergy.com](mailto:support@pointlogicenergy.com)



## Sales

Phone: 844.301.7335  
<https://ihsmarkit.com/products/pointlogic-gas.html>

## IHS Markit Customer Care

CustomerCare@ihsmarkit.com

### Asia and the Pacific Rim

Japan: +81 3 6262 1887

Asia Pacific: +604 291 3600

Europe, Middle East, and Africa: +44 1344 328 300

Americas: +1 800 447 2273

For a free three-week demo of the PointLogic product, fill out the form on our website and a representative will respond:  
<https://ihsmarkit.com/forms/contactinformation.html?fid=351100>

## Disclaimer

The information contained in this presentation is confidential. Any unauthorized use, disclosure, reproduction, or dissemination, in full or in part, in any media or by any means, without the prior written permission of IHS Markit or any of its affiliates ("IHS Markit") is strictly prohibited. IHS Markit owns all IHS Markit logos and trade names contained in this presentation that are subject to license. Opinions, statements, estimates, and projections in this presentation (including other media) are solely those of the individual author(s) at the time of writing and do not necessarily reflect the opinions of IHS Markit. Neither IHS Markit nor the author(s) has any obligation to update this presentation in the event that any content, opinion, statement, estimate, or projection (collectively, "information") changes or subsequently becomes inaccurate. IHS Markit makes no warranty, expressed or implied, as to the accuracy, completeness, or timeliness of any information in this presentation, and shall not in any way be liable to any recipient for any inaccuracies or omissions. Without limiting the foregoing, IHS Markit shall have no liability whatsoever to any recipient, whether in contract, in tort (including negligence), under warranty, under statute or otherwise, in respect of any loss or damage suffered by any recipient as a result of or in connection with any information provided, or any course of action determined, by it or any third party, whether or not based on any information provided. The inclusion of a link to an external website by IHS Markit should not be understood to be an endorsement of that website or the site's owners (or their products/services). IHS Markit is not responsible for either the content or output of external websites. Copyright © 2021, IHS Markit®. All rights reserved and all intellectual property rights are retained by IHS Markit.

