



Globalisation of natural gas

1st Annual European Gas Dialogues Conference

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ICE (NYSE: ICE) designs, builds and operates digital networks.

**We approach every challenge as
an opportunity to connect.
People with data. Markets with
Transparency. Industries with
technology. In our world,
innovation begins with
connection.**



ICE Exchanges and Clearing House power global markets

Global Footprint

- Exchanges and clearing houses throughout North America, Europe and Asia
- Market infrastructure in all major trading centers
- Ability to manage risk and make informed decisions in the geography of your choice
- Operational and capital efficiencies through clearing and common technology



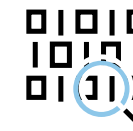
Asset Classes

- Energy
- Environmental
- Metals
- Agriculture
- Interest Rates
- Equity Derivatives
- Credit Derivatives
- Forex (FX)



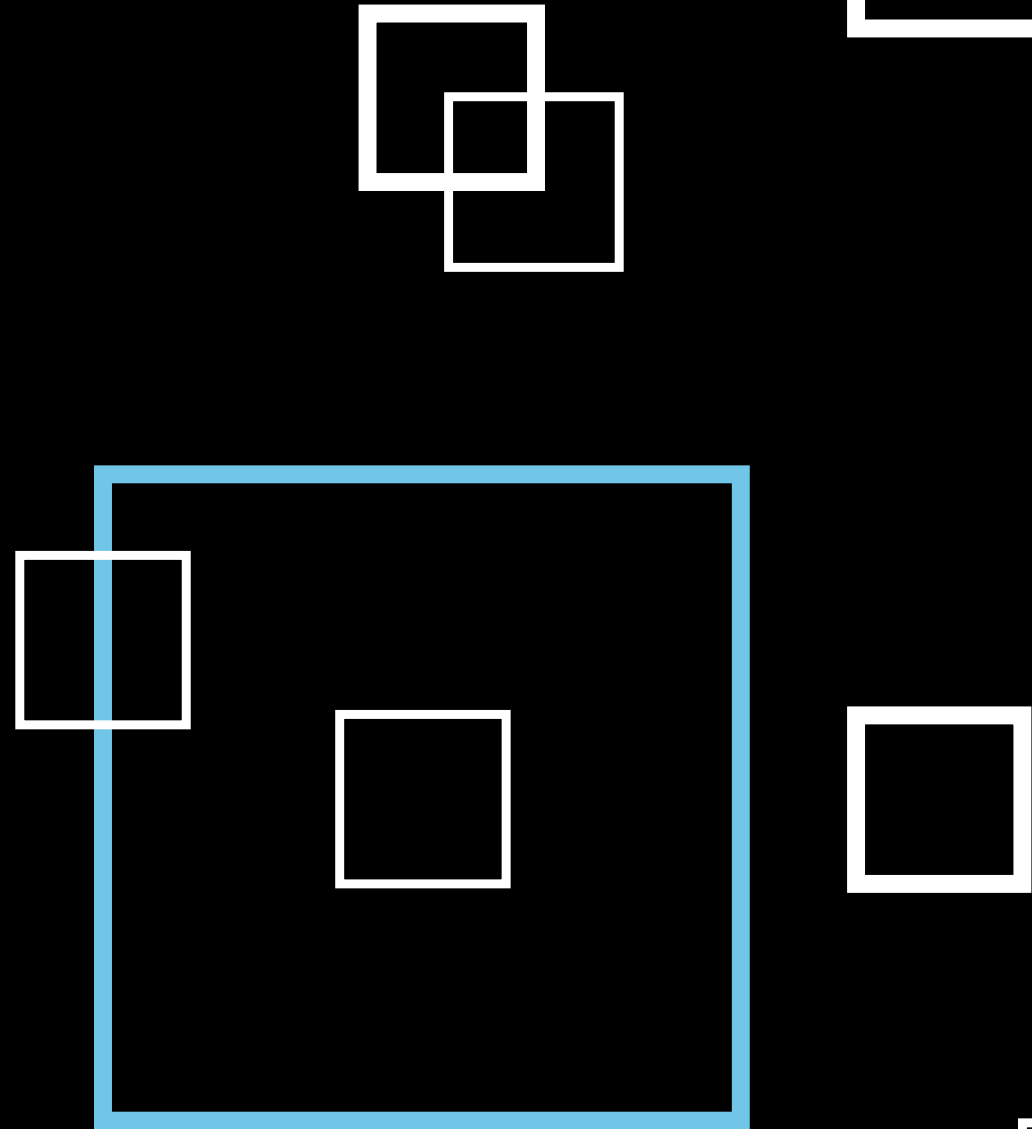
Technology

- Ultra-secure, highly resilient execution and delivery services through the ICE Global Network
- Depth and breadth of content and community
- Scalable bandwidth
- Flexible delivery options including fiber, wireless, colocation and hosted connectivity
- High-security delivered over private lines



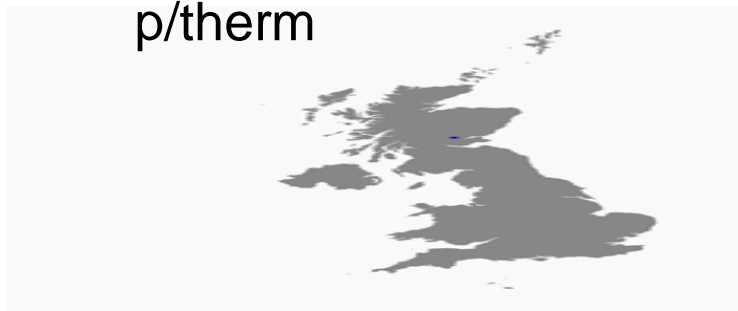
Building global benchmarks

Natural gas

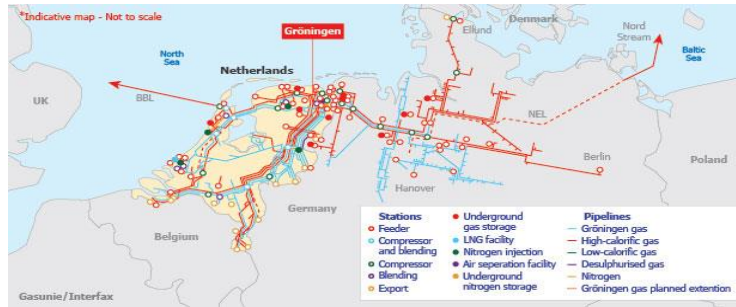


The international role of the Euro in the field of energy

⌚ Once upon a time.....



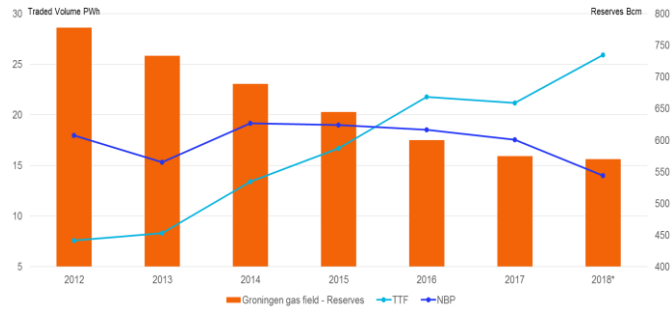
🔄 Dutch gas roundabout



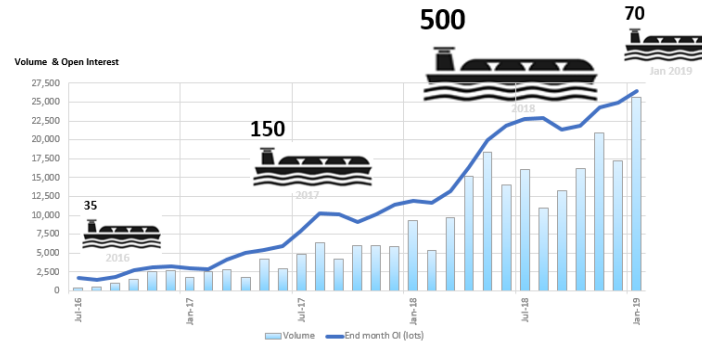
⚖️ Price convergence



📈 Trading volumes



🌐 Globalisation



💰 Asset class

200,000 lots ADV
 ↓
 1 million lots ADV

Globalisation of natural gas

Driven by the liberalisation of LNG

64 basis markets

Europe

Northwest Europe's natural gas markets are a crucial driver for balancing the LNG market, with their diverse energy supply and flexible infrastructure. ICE's **NBP** and **TTF** are the most liquid natural gas trading hubs in Europe.

235+ physical markets

North America

The Shale revolution has amplified the importance of **ICE's basis markets** as Henry Hub prices diverge from key Shale basins. Our 64 basis markets trade at prices reflective of regional supply and demand dynamics. North America's status as a key exporter of natural gas continues to strengthen.

Asia Pacific

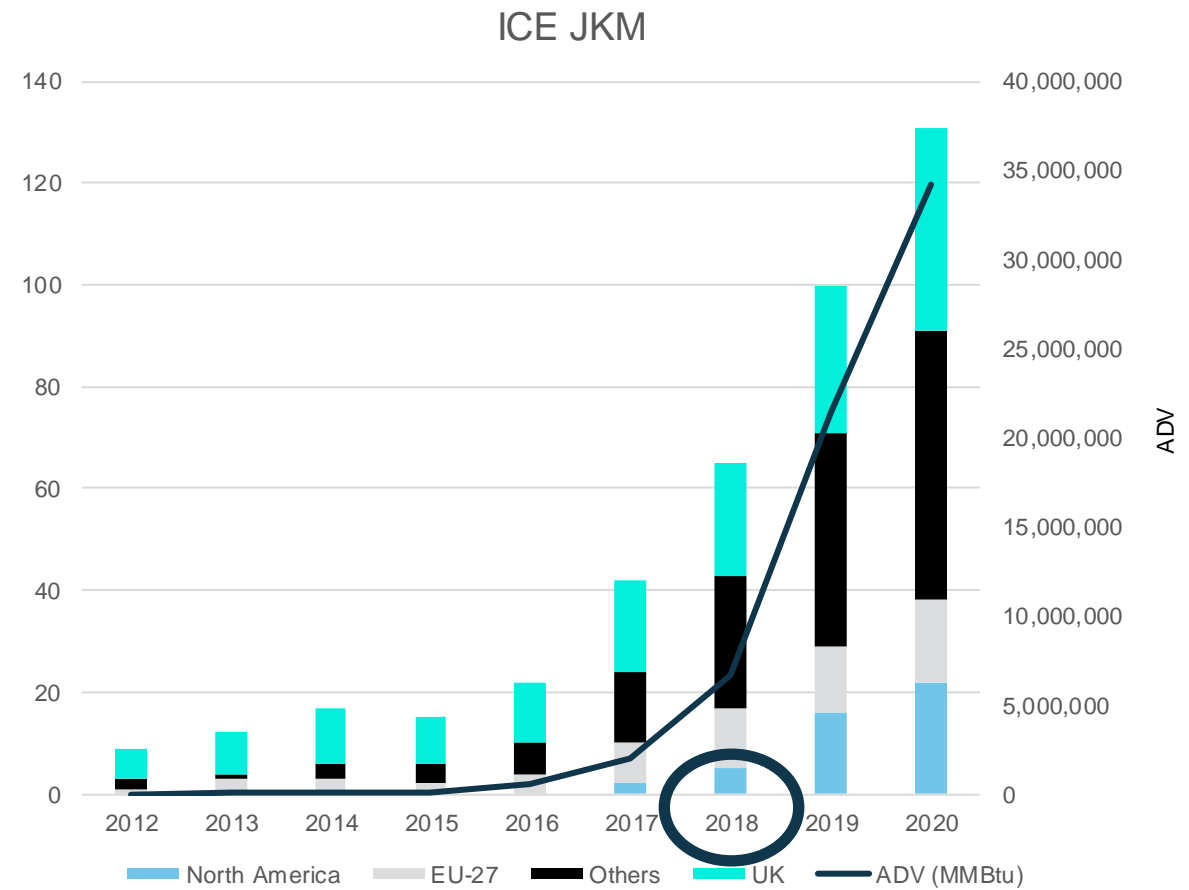
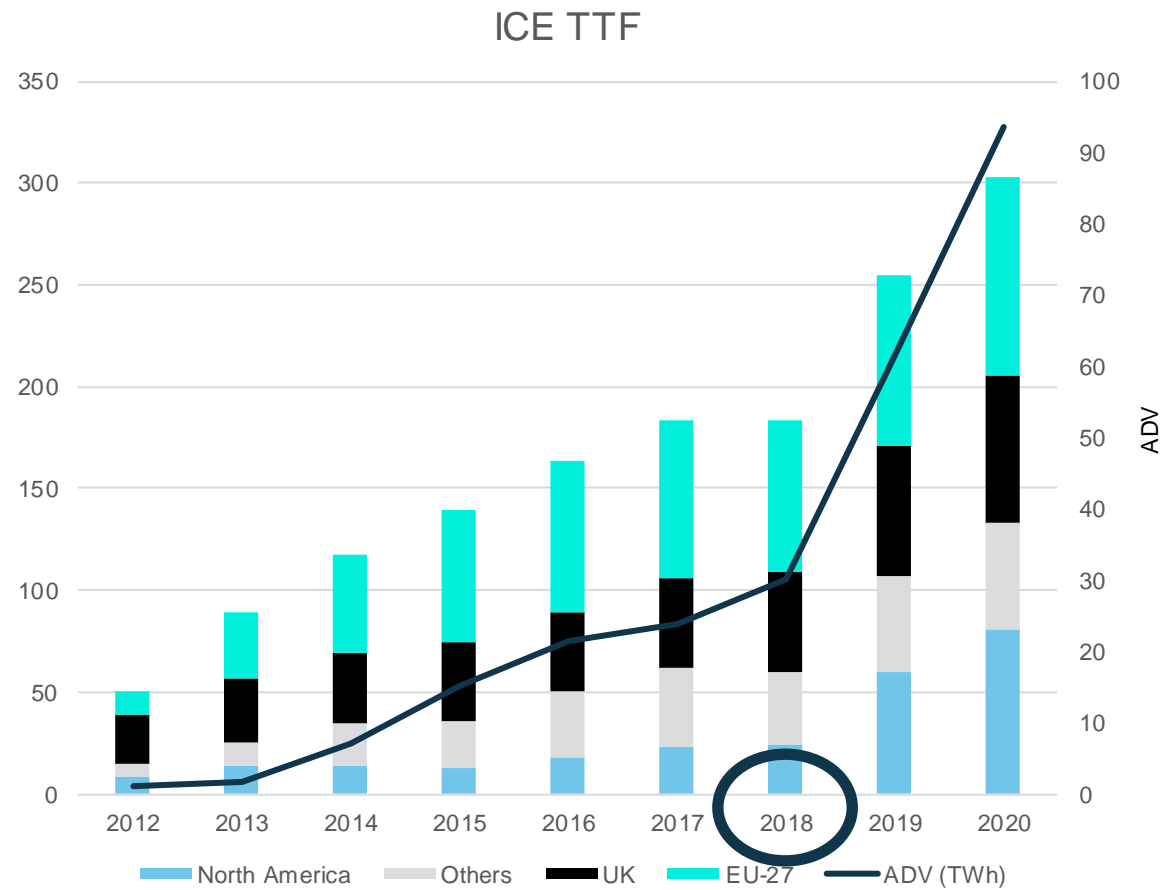
Asia is driving global gas demand due to its fast-growing economies and environmental concerns. Our **JKM LNG** contract is the benchmark for natural gas across the region.

Key

-  **ICE's Key NA Basis Markets**
 - TETCO M3
 - Dominion South
 - Chicago Citygates
 - MI Consolidated Citygates
 - Houston SC
 - Henry
 - AECO
 - NWP Rockies
 - SoCal Border
 -  **ICE's Key LNG Contracts**
 - Gulf Coast Marker (GCM)
 - TTF and NBP First Lines
 - JKM
- Global Gas Trade Flows**

TTF and JKM exchange trading statistics

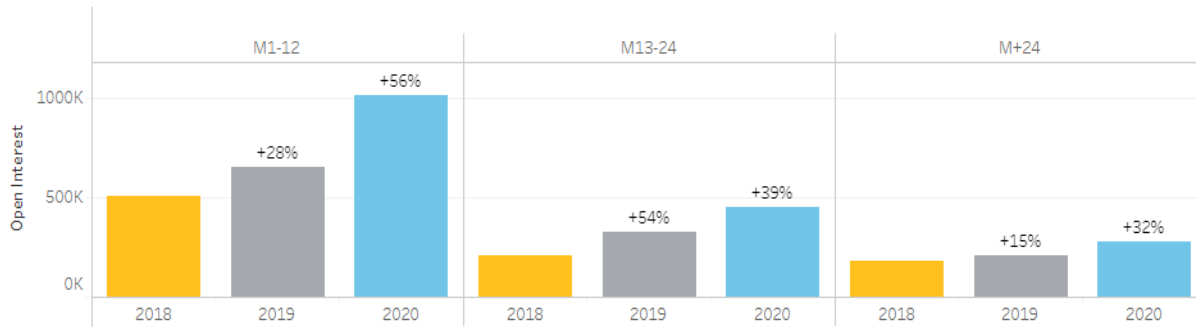
Volume and participation growth



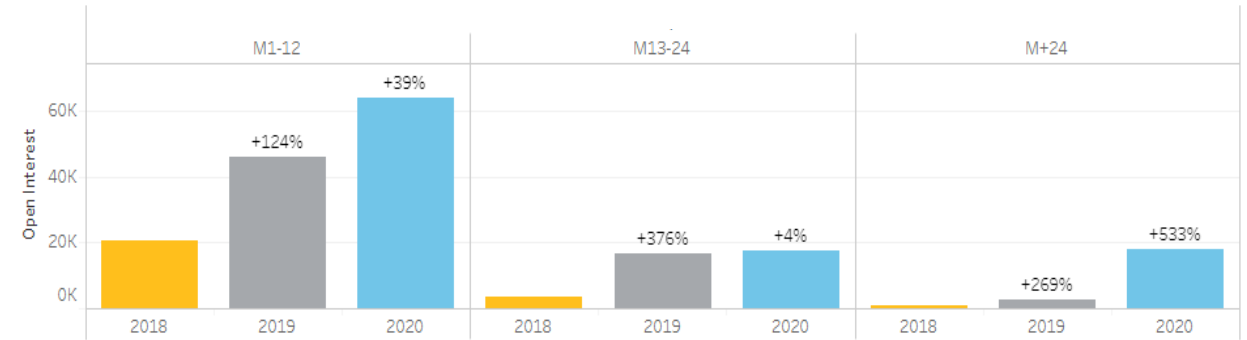
TTF and JKM exchange trading statistics

Maturity indicators

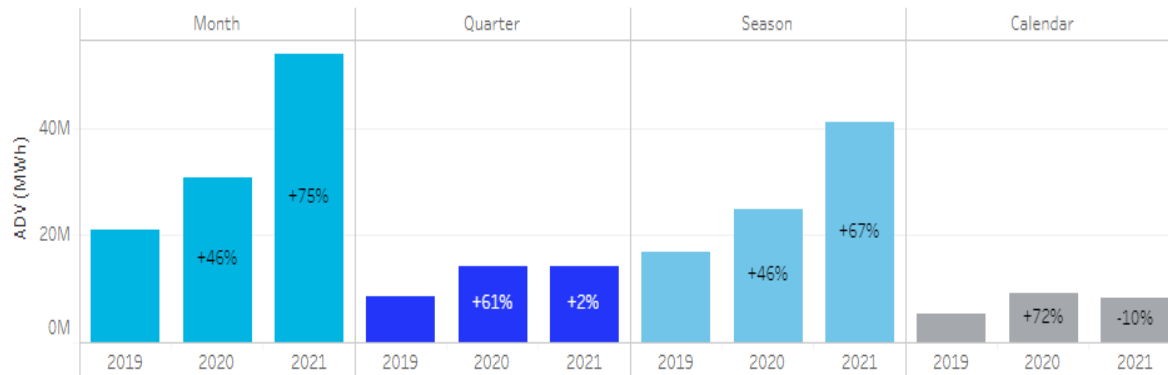
TTF Open Interest (EOY)



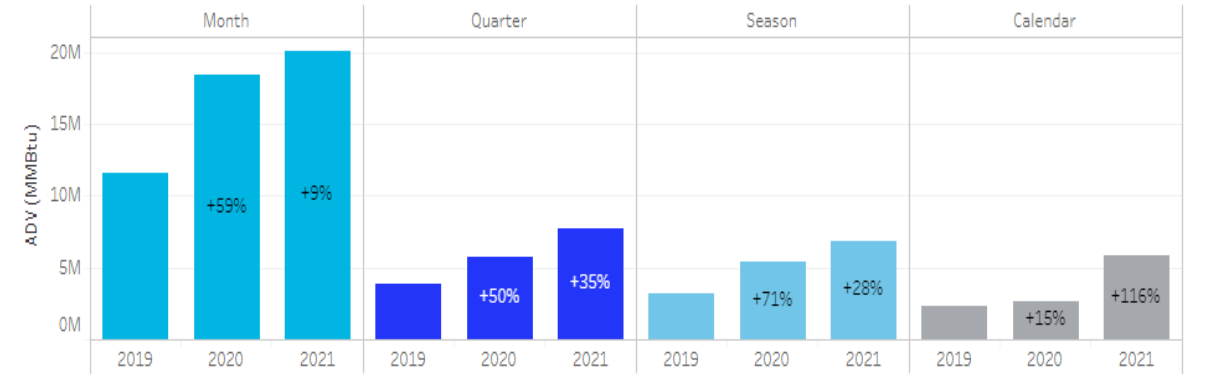
JKM Open Interest (EOY)



TTF Traded Volume distribution

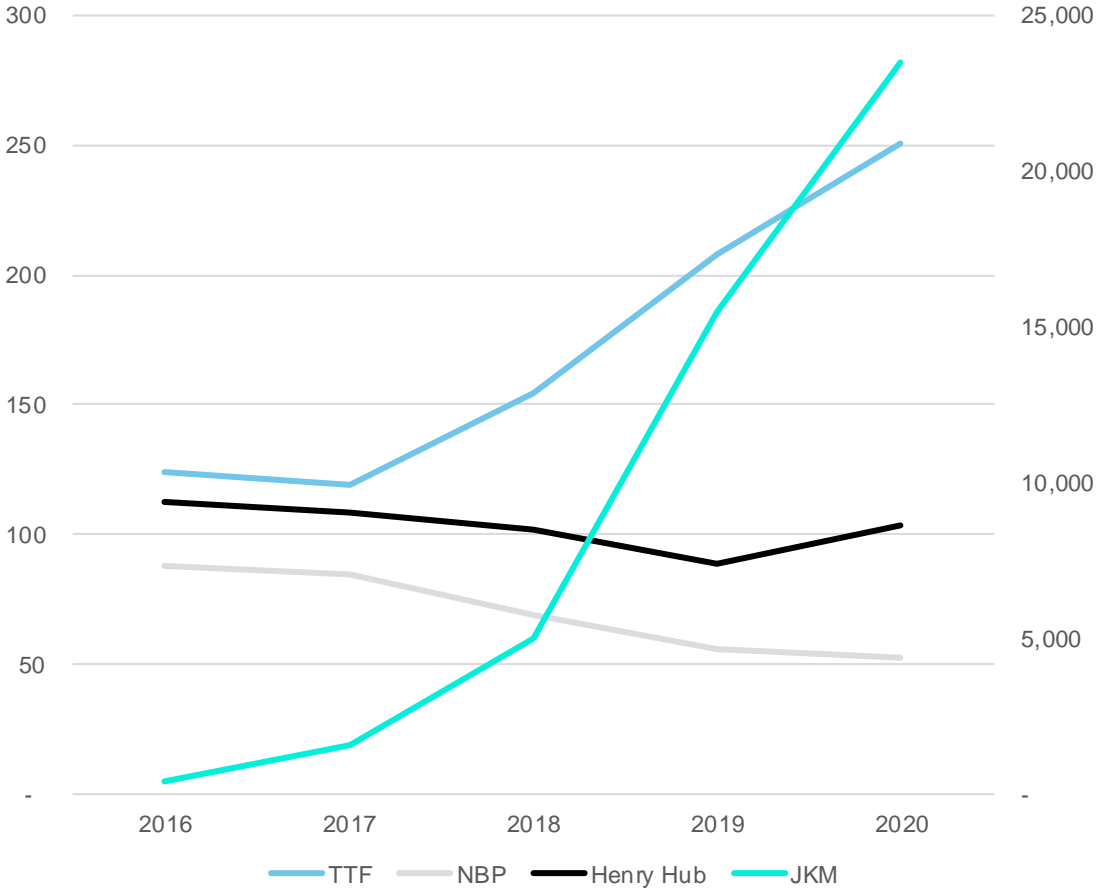


JKM Traded Volume distribution

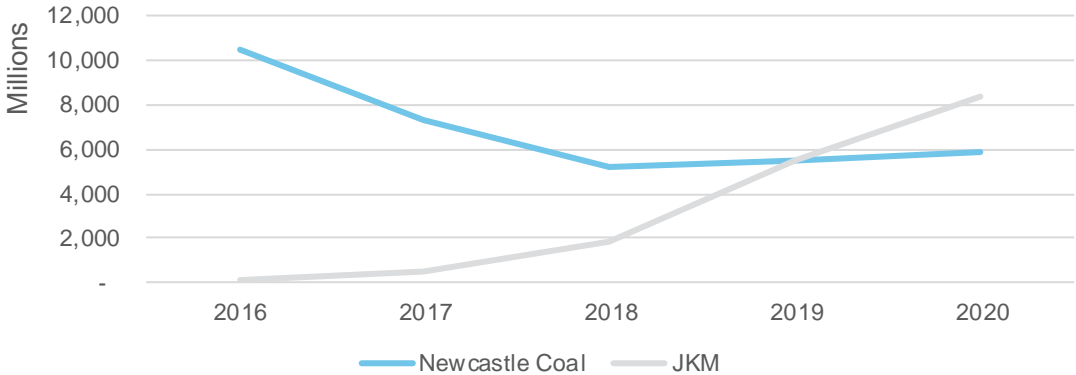


Natural gas benchmarks: a new landscape?

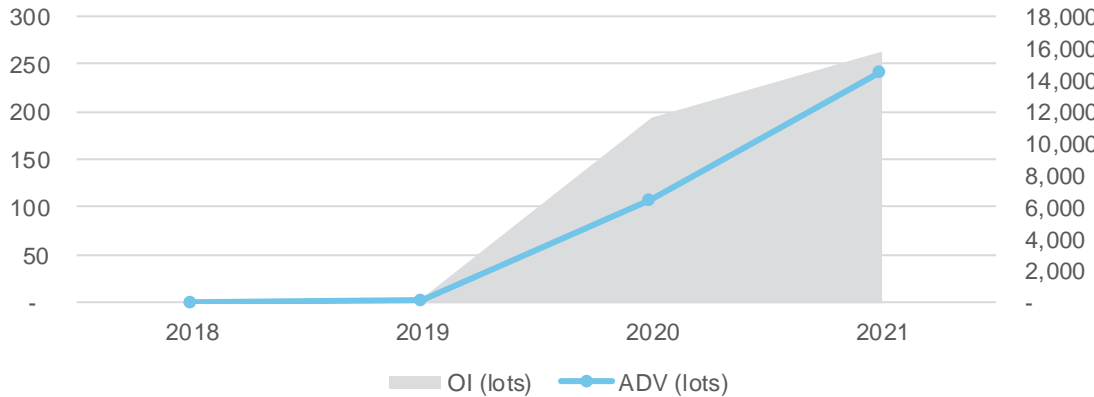
Churn rates for benchmark hubs (2015=100)



Traded Volume in MMBtu



TTF first line \$MMBtu



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