

# Oil in the crosshairs



## About Wood Mackenzie

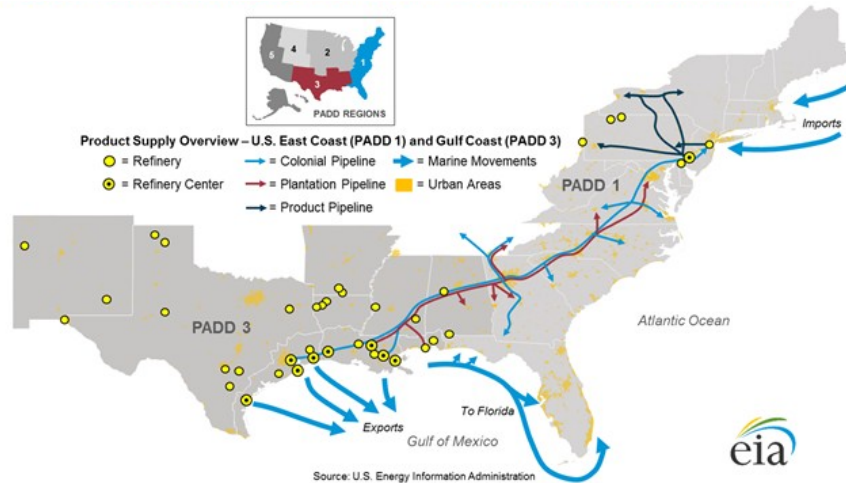
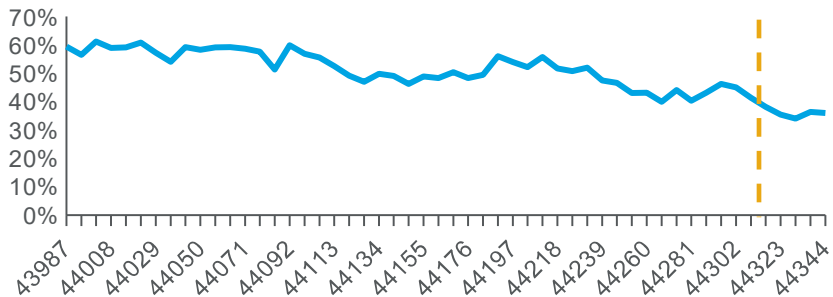
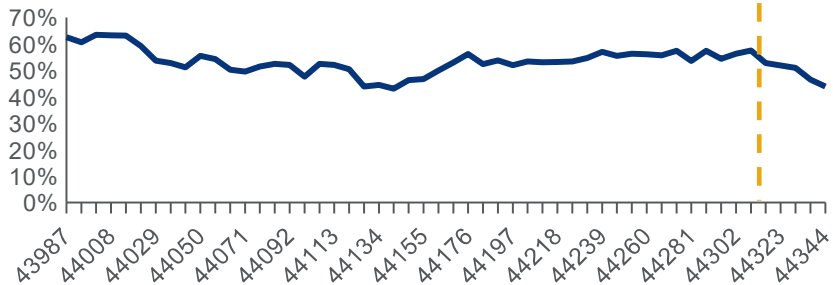
We provide commercial insight and access to our experts leveraging our integrated proprietary metals, energy and renewables research platform.

Wood Mackenzie is ideally positioned to support consumers, producers and financiers of the new energy economy.

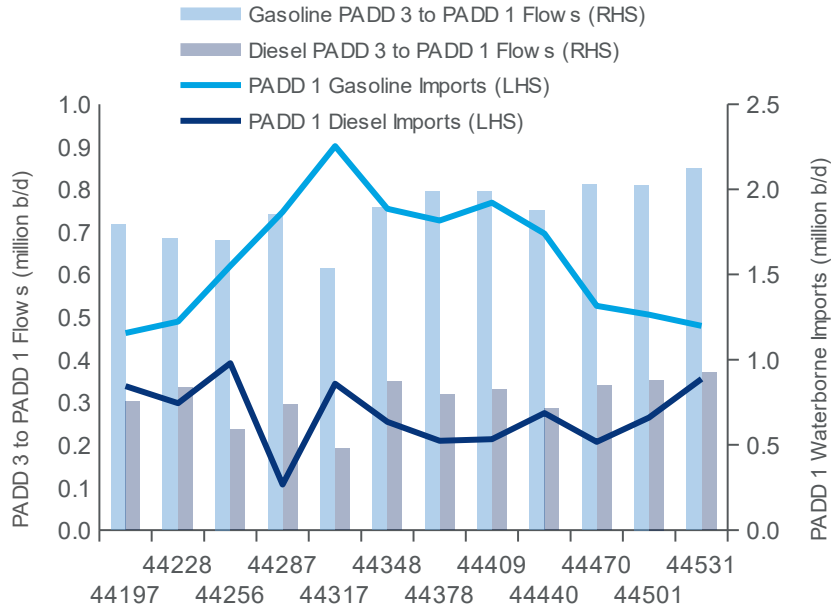
- Acquired Genscape, MAKE and Greentech Media (GTM)
- Leaders in the energy transition and cross-commodities
- Over 600 sector-dedicated analysts and consultants globally
- Located close to customers and industry contacts



# Colonial Pipeline: Ransomware attack review

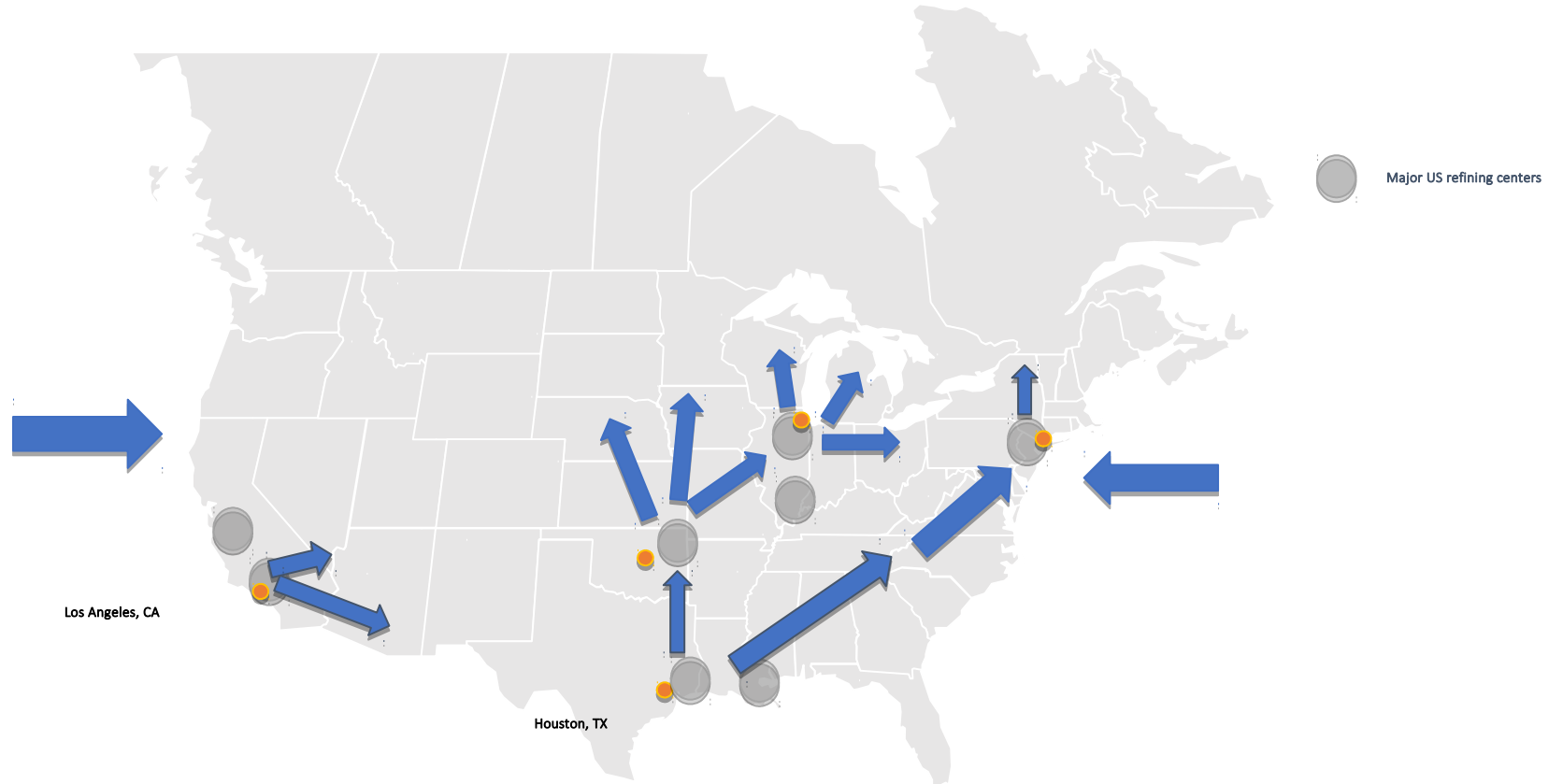


# May Colonial Pipeline outage rallied NYH prices, pulling in 900kbd of gasoline imports as PADD 3 to PADD 1 flows dipped



Source: Energy Information Administration

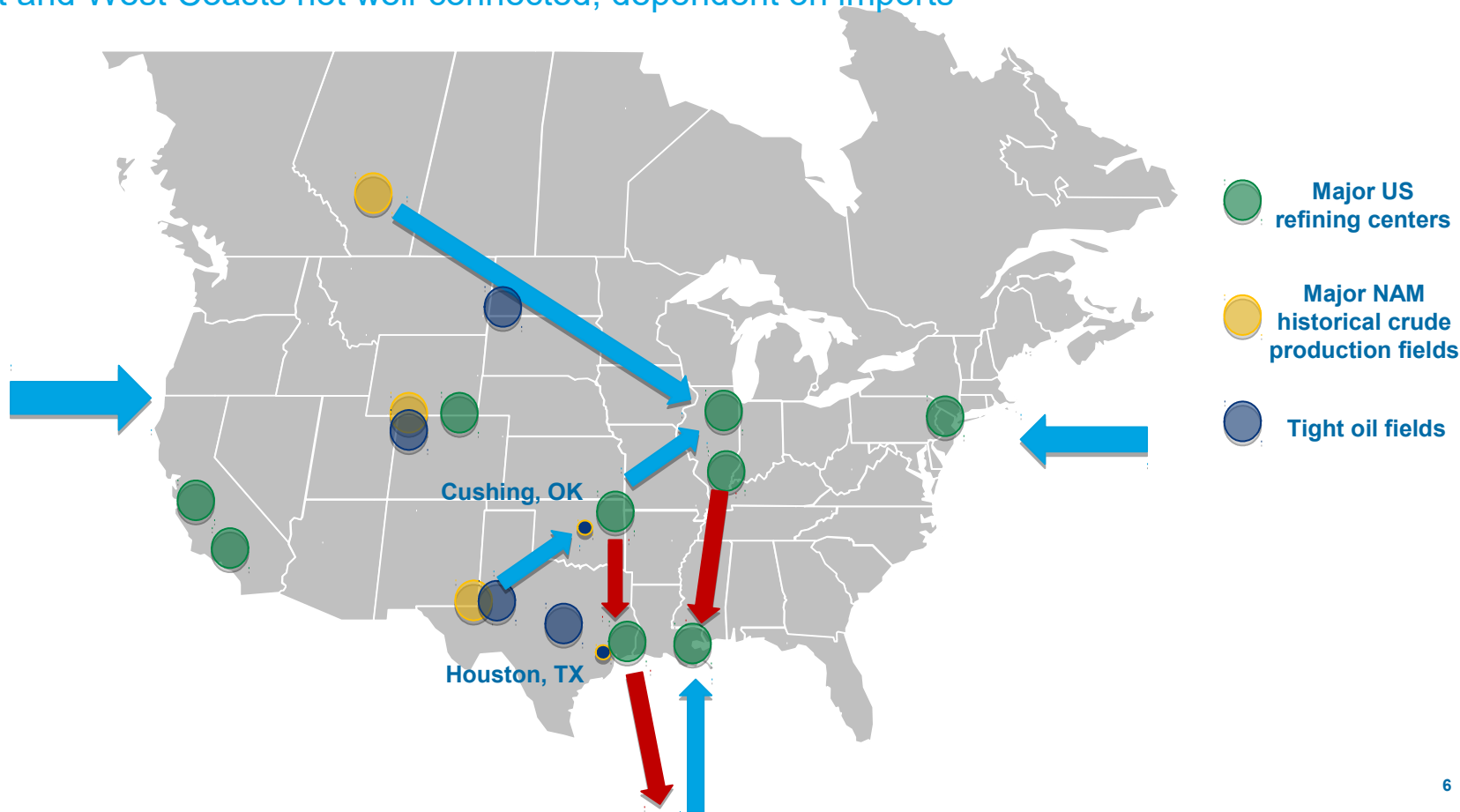
# US refined products midstream flows



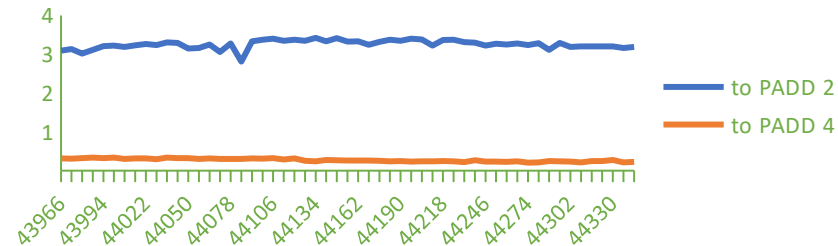
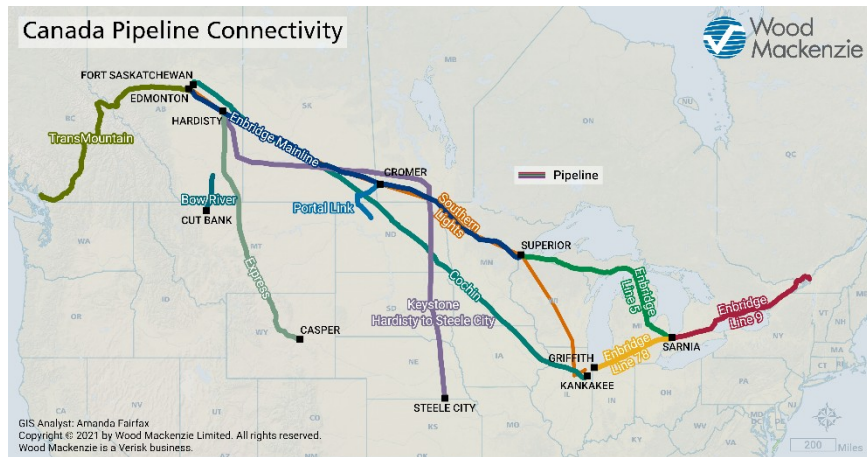


# US Crude midstream flows

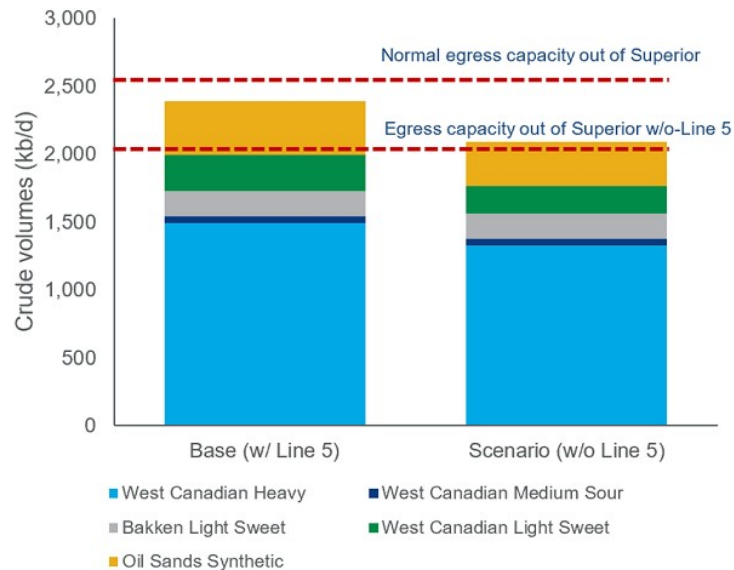
US East and West Coasts not well-connected; dependent on imports



# Canada-to-US midstream dependency



## Superior markets, Mainline impacted by possible Line 5 closure





## Mid Continent – Midstream dependencies

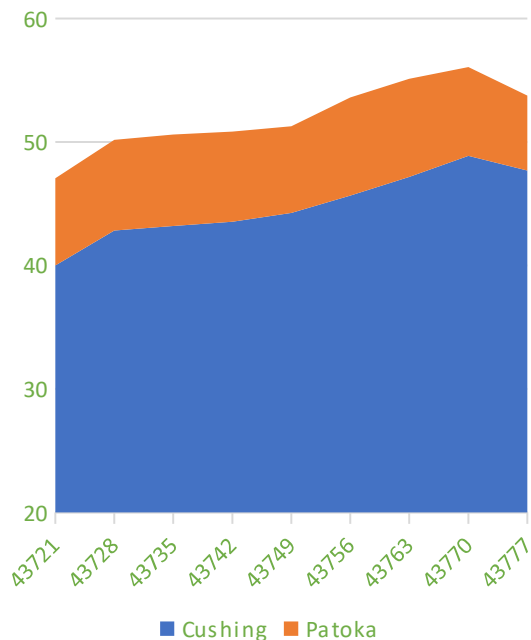
Crude inventories in **Cushing** declined 1.194mn bbls to 47.86mn bbls for week ending Nov. 8, partially due to lower supply from Keystone. Stocks posted the first draw since mid-September.

Flows on the Steele City-to-Cushing segment of Keystone decreased 176,000 bpd to 0 bpd for week ending Nov. 8, bringing the two-week decline to 346,000 bpd.

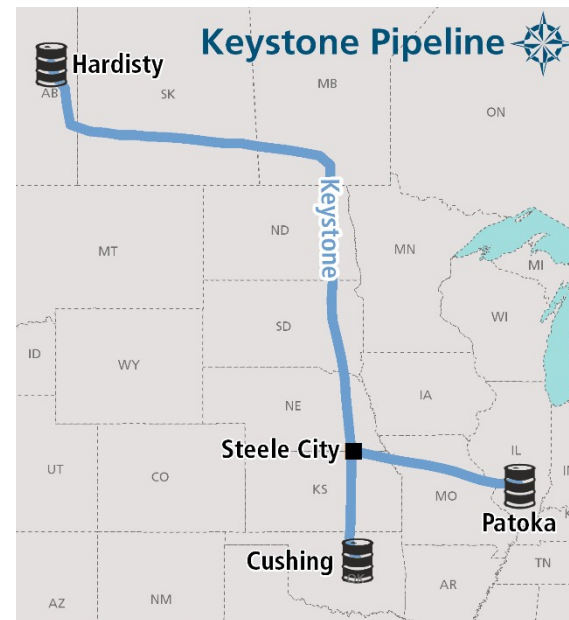
WTI front month prices rose \$0.35/bbl to a daily high of \$57.32/bbl in the first 40 minutes following WoodMac's Nov. 11 report of the **Cushing** storage decrease.

**Patoka** stocks fell 1.107mn bbls to 6.082mn bbls for week ending Nov. 8, the lowest level since September 2014. Capacity utilization at the hub fell to 35%, compared to the record low of 31%.

Flows on the 590,000 bpd Steele City-to-Patoka segment of Keystone pipeline decreased 172,000 bpd to 0 bpd for week ending Nov. 8.

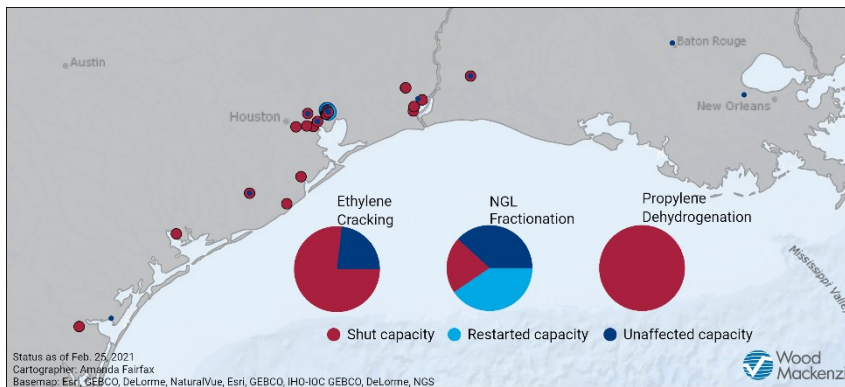
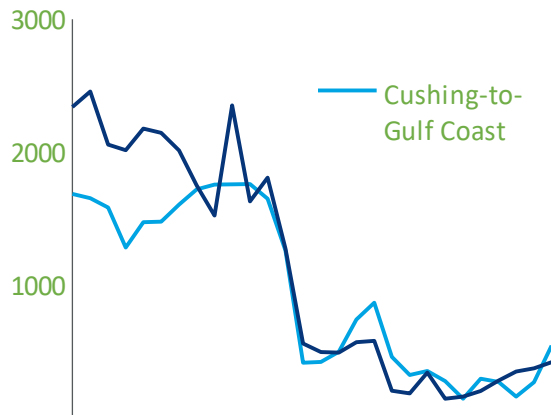


### Pipeline route





## A Texas snowstorm – highlighted reliance on electric grid



Feb. 26  
 remaining  
 petchem  
 outages

## Conclusion

- Regulatory problems/challenges hinder new pipeline builds
  - Keystone XL, Line 5, Dakota Access
  - “NIMBY”
- Cost, difficulty of waterborne movements between US regions due to US Jones Act
- Rail/truck movements of crude, refined products limited due to cost, economies of scale
- Challenges to raising capital as the Energy Transition takes center stage

## Suzanne Danforth

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Suzanne leads our global short-term demand outlook, as well as focusing on North American short-term and long-term demand. She also manages the regional team of downstream oil and NGL analysts.

Suzanne brings 20 years of experience in the energy information space to her role. This includes developing methodologies and price assessments for global energy and metals commodities at Argus and S&P Platts and leading near-real-time product development for NGLs and refined products fundamental data at Genscape.

Prior to joining Wood Mackenzie, she managed the downstream oil team at Genscape, leading content creation and product development focused on providing transparency in oil fundamental data and markets.

### Education

BA, Political Science and Economics, Rice University



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