



Panel: Infrastructure & new supply sources to Europe

FLAME

Amsterdam, 14 May 2019

Dr. Wolfgang Peters, MBA

Managing Director, The Gas Value Chain Company GmbH, Germany

Our Panel

Moderator: Wolfgang Peters, Managing Director, The Gas Value Chain Company

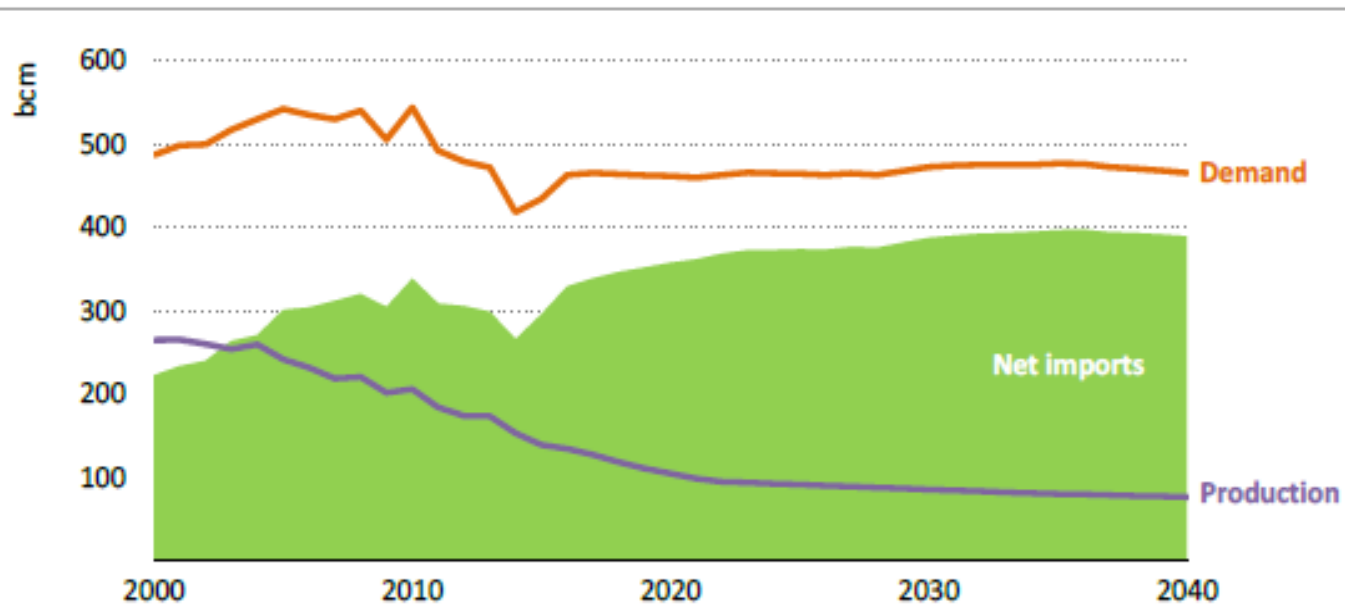
Stephan Kamphues, Chairman of the Executive Board, Vier Gas Transport

**Reinhard Ontyd, Chief Commercial Officer, Nord Stream 2
Simon Pirani, Senior Visiting Research Fellow, OIES**

Marija Savova, Head of Commercial Development, TAP

IEA WEO 2017: flat demand at ~450 bcm/a
Consumption 2017: ~550 bcm/a
Consumption 2018: ~535 bcm/a

Figure 8.9 ▷ Natural gas balance of the European Union in the New Policies Scenario

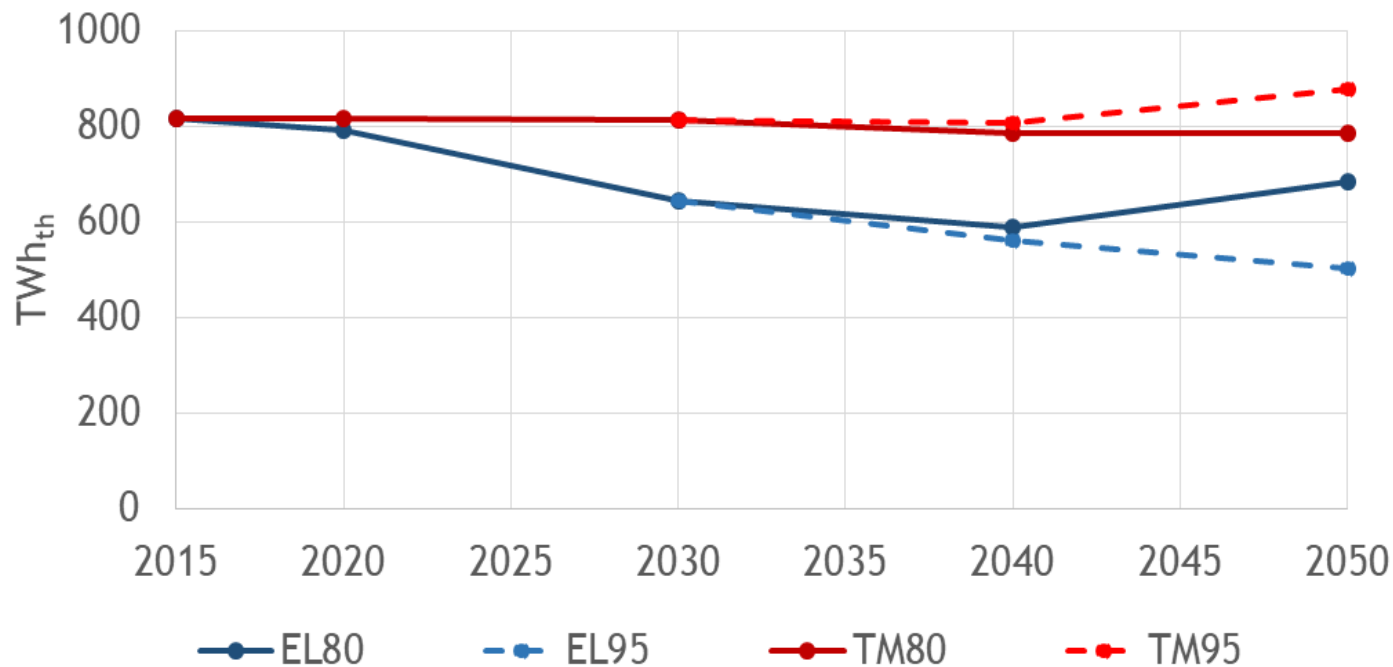


Even with a flat demand outlook, the European Union's gas imports increase to 2040 as domestic output continues to decline

Source: IEA WEO 2017

The underrated role of gas in the decarbonizing energy space

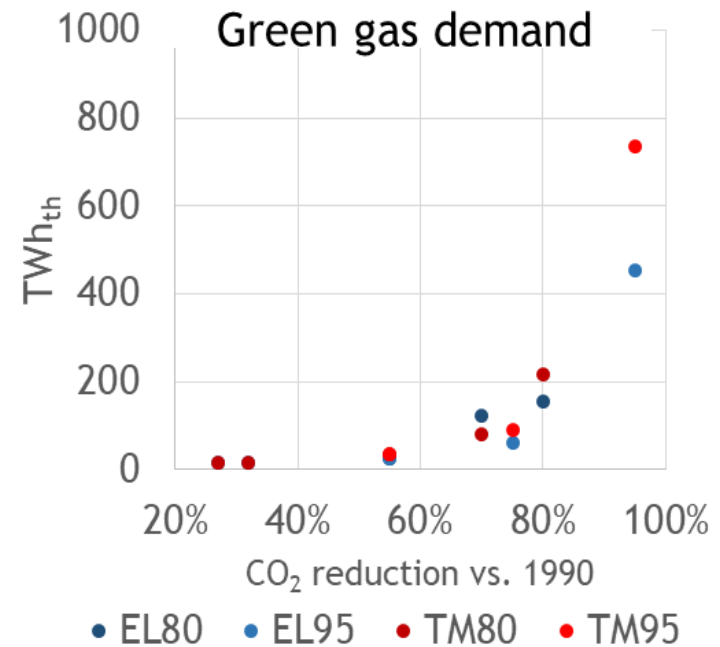
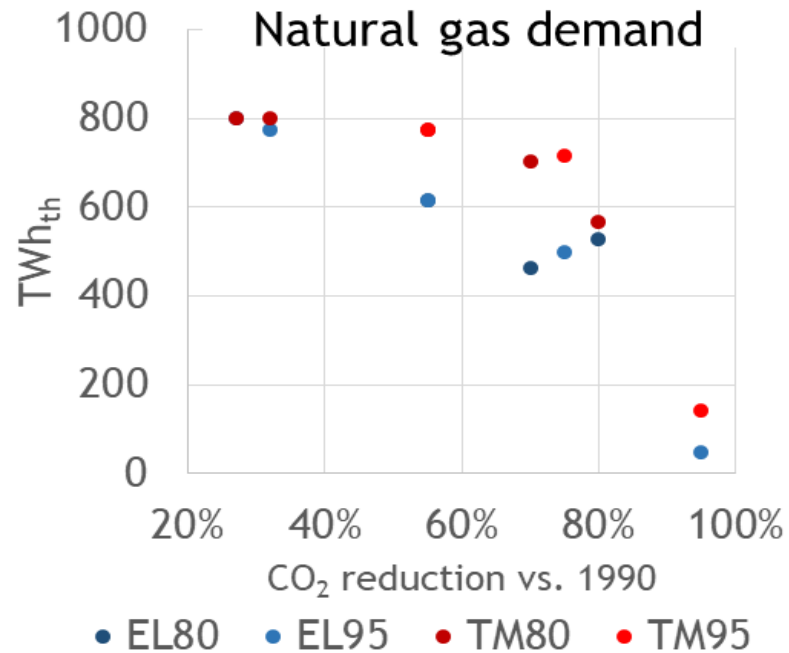
Gas – as molecular energy carrier – indispensable in either scenario:
TM 95: > 800 TWh
EL 95: ~500 TWh



Source: Hecking/Peters, 'The underrated long-term relevance of gas in the decarbonizing German energy space'

The underrated role of gas in the decarbonizing energy space

Fossil gas renders climate benefit up to ~70% decarbonization
 Beyond ~70% decarbonization gas turns increasingly 'green'

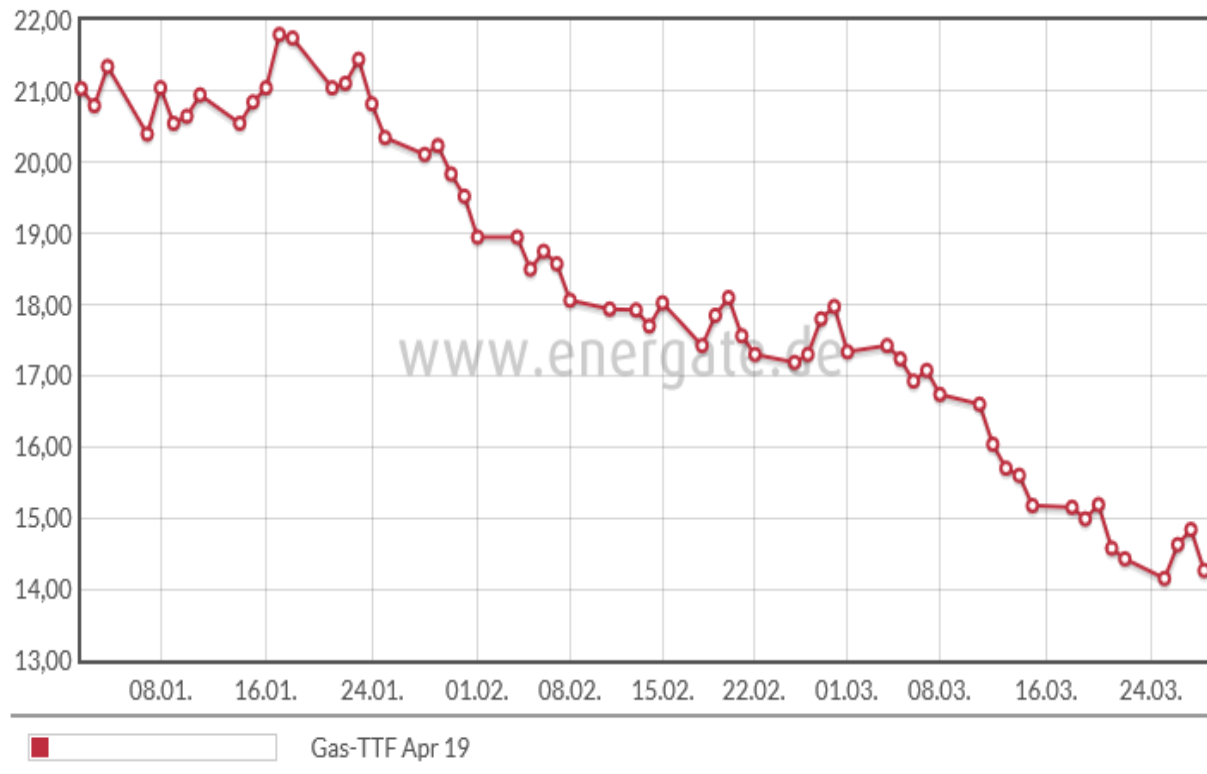


Source: Hecking/Peters, 'The underrated long-term relevance of gas in the decarbonizing German energy space'

Price developments winter 2018/2019: LNG ante portas

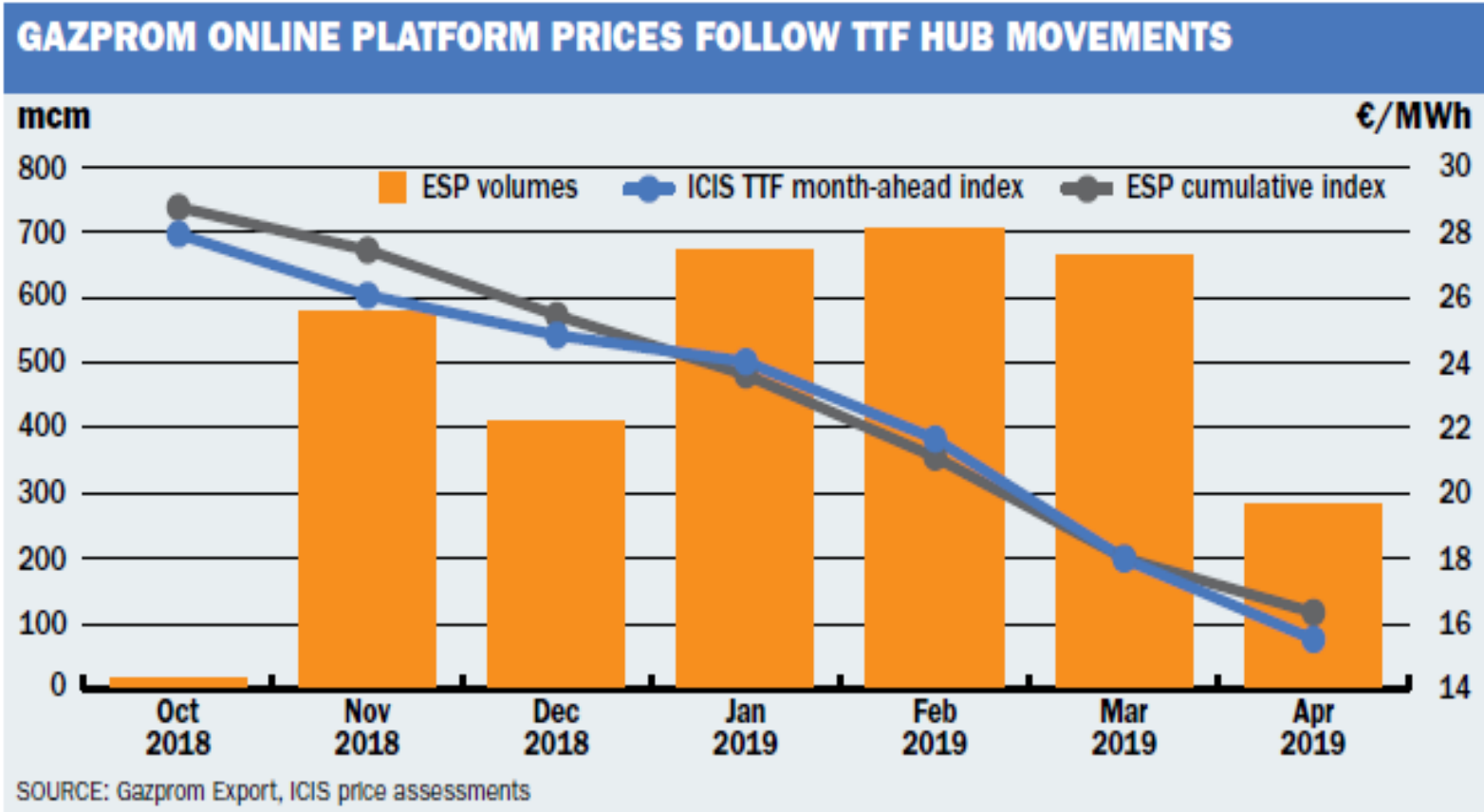
LNG surge sends prices plummeting

GAS-TTF APR 19



Source: <https://www.energate-messenger.de/markt/preise/121152>

Supplier competition at work: how Gazprom makes up min-take LTC down-nominations made up by more ESP sales - trailing TTF



Source: ICIS Heren, GIF 26.07

Ukrainian transit expiring 31.12.2019

OIES: 52-90 bcm/a needed in 2020 – outcome trilateral talks at risk?

Map 3: The Ukrainian pipeline system



Source: OIES

Source: : OIES Insight 41 – Pirani – November 2018

Ukrainian transit - Northwest-European Market: Nordstream 2 ready to save the day?

Map 1: The Nord Stream pipelines



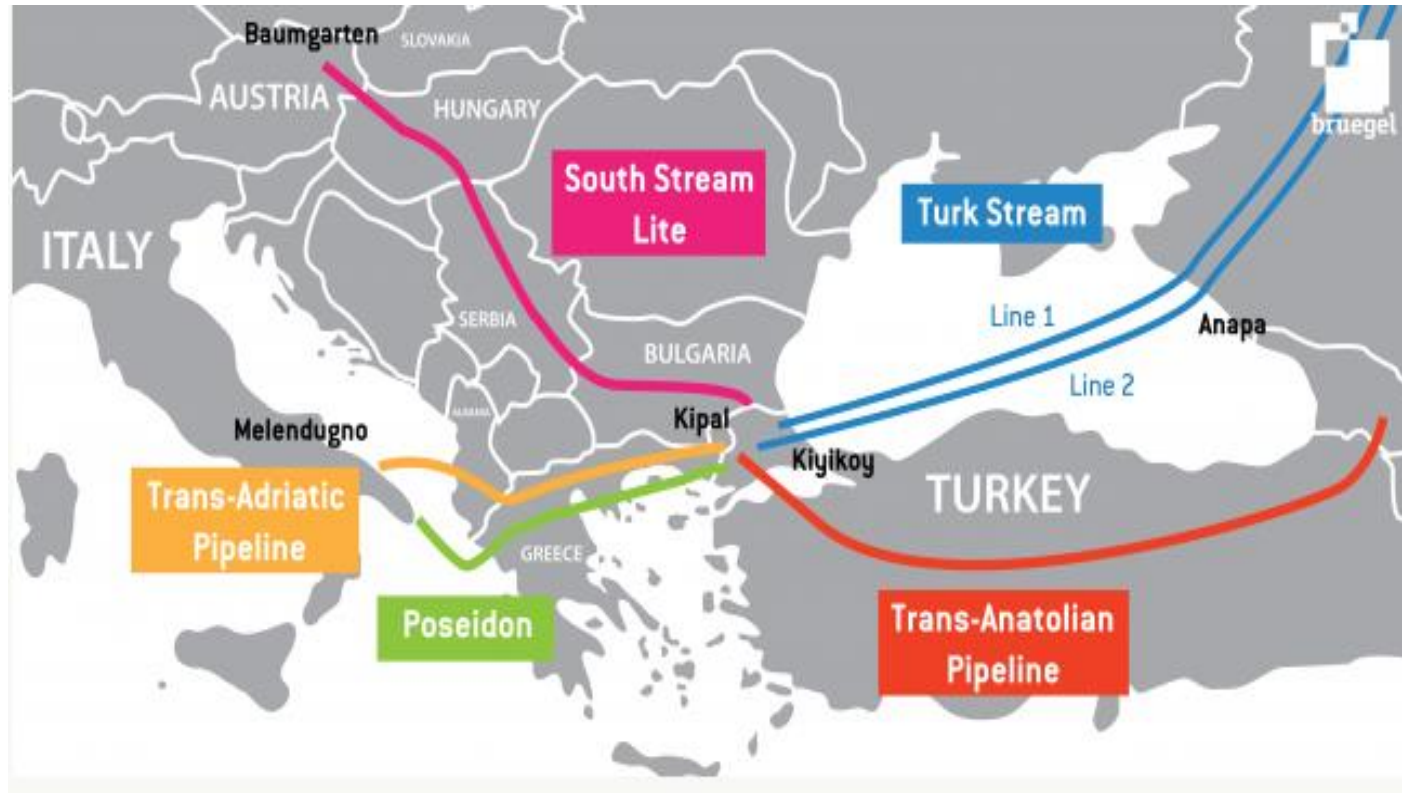
Source: OIES

Source : OIES Insight 41 - Pirani - November 2018

Ukrainian transit - Northwest-European Market: The Danish permitting saga: Is the 'tail wagging the dog'?



Ukrainian transit – Southeast-Central-European markets Turkstream - and onward connections - ready to save the day?



Ukrainian transit

Can we expect Southern-Corridor gas to fill at least part of the gap?



Ukrainian transit

Can we expect East-Med gas to fill at least part of the gap?



Figure 5: The East Med Pipeline