Asia-Pacific Economic Cooperation

APERC Asia Pacific Energy Research Centre

# 10.d. APERC Oil Report 2020

**Plenary Session**
The 60th Meeting of APEC Energy Working Group (EWG)
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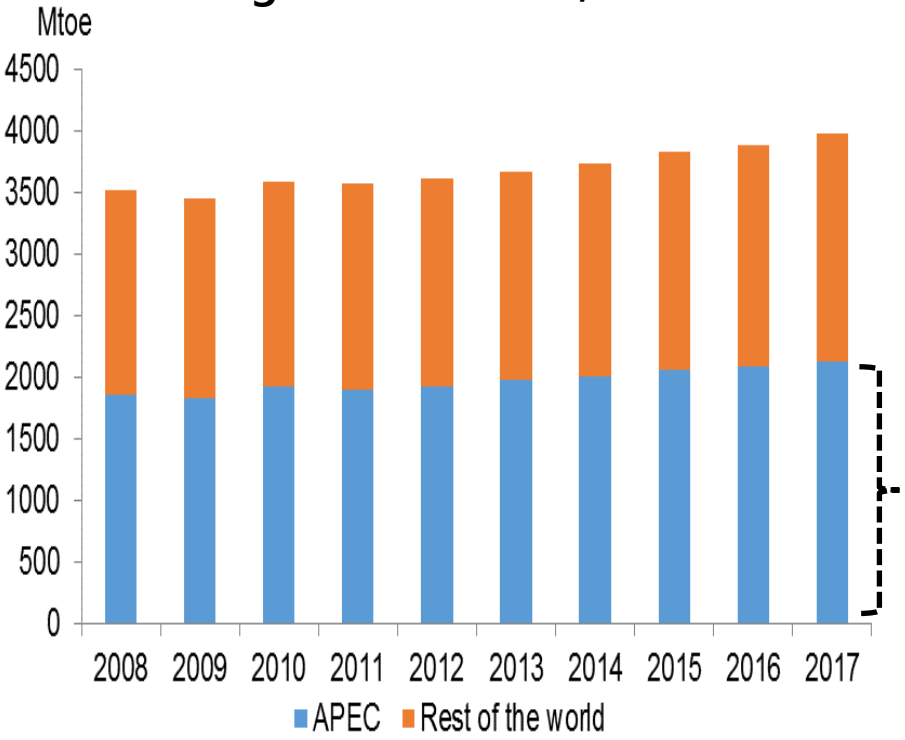
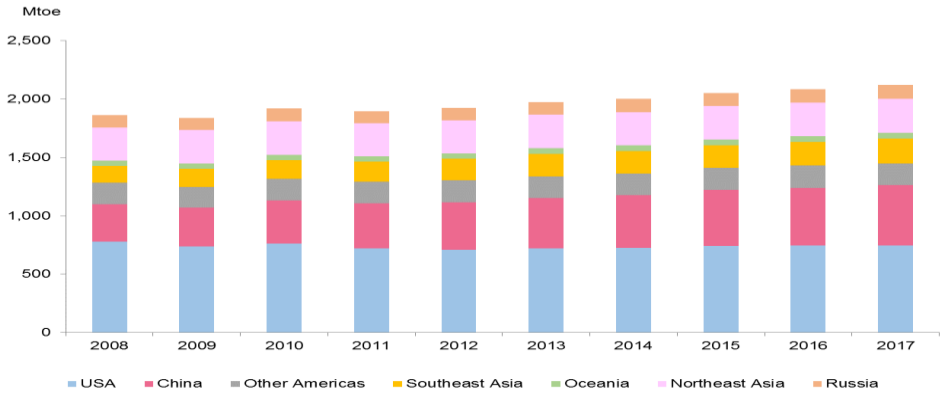
# APEC oil demand has been growing strongly for the past decade

APEC vs global demand, 2008-2017




APEC demand, by region, 2008-2017




Source: APERC analysis and IEA (2019)

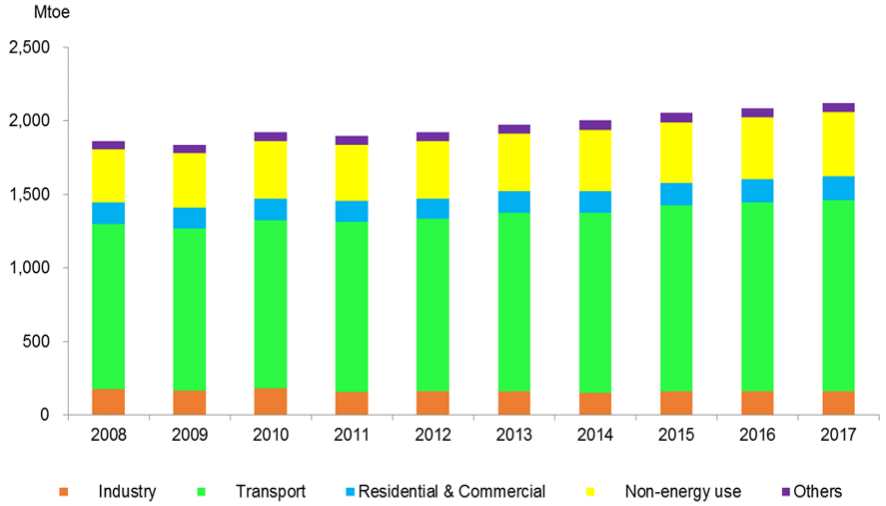
*Global oil consumption reached 3,985 million tonnes in 2017.*

*APEC oil demand accounted for 53% of total world demand.*

*APEC high growth (1.7% annually) was mainly due to the contribution of China and southeast Asia.*

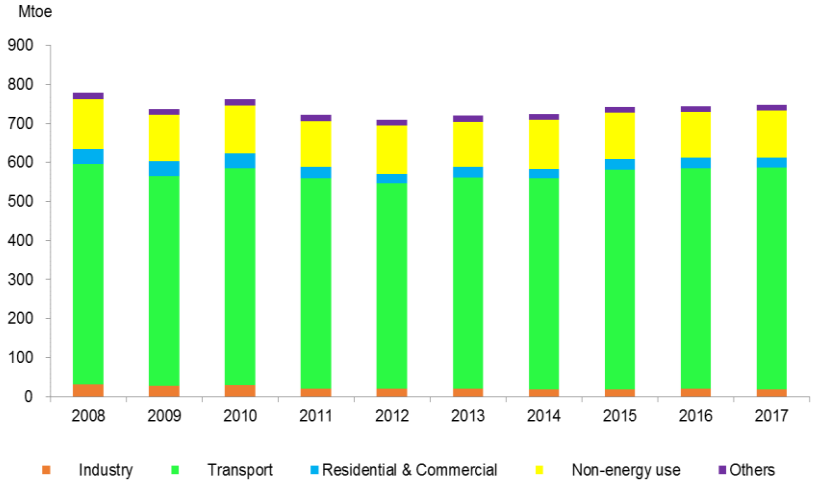
# Transport sector has the largest share of APEC oil consumption

## APEC oil demand, by sector, 2008-2017

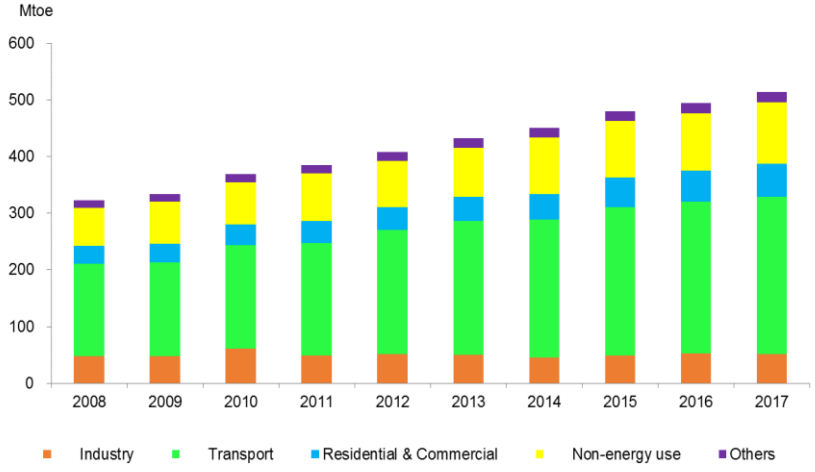



*Source: APERC analysis and IEA (2019)*

## U.S. demand, by sector, 2008-2017




## China demand, by sector, 2008-2017




*Transportation has been the dominant sector (61%) in APEC during 2008-2017.*

*APEC demand increase has slowed down due to declining demand in the U.S. (-0.45% annually) while China demand is growing at 6.5% annually.*

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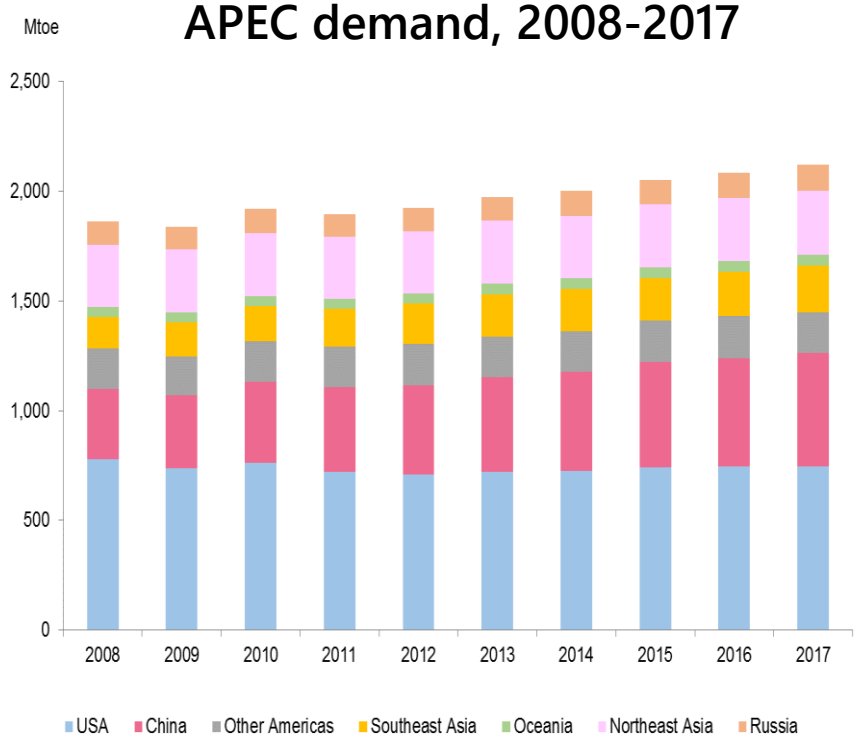
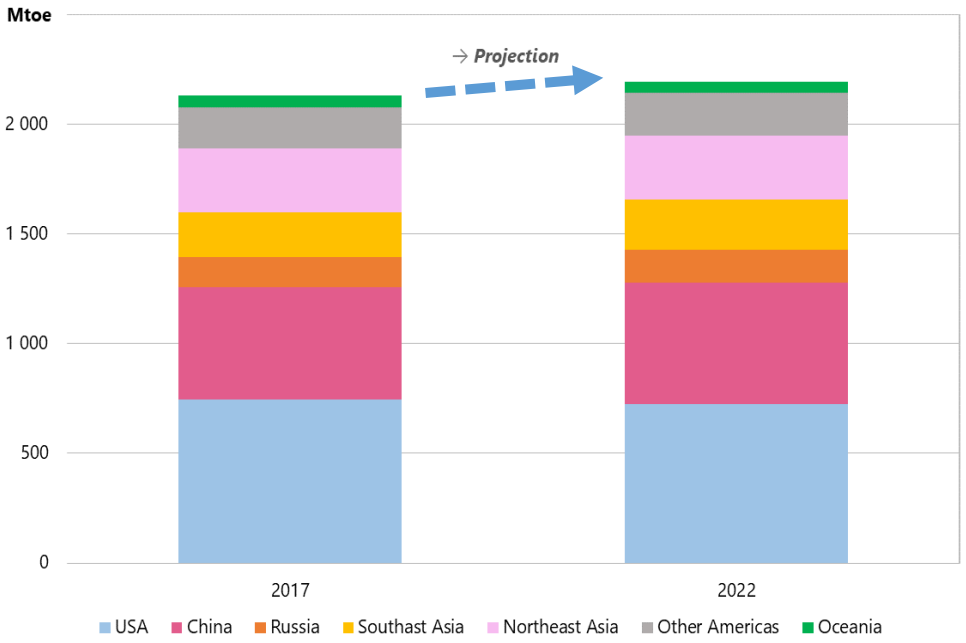
# APEC oil demand continues its growth towards 2022

## APEC demand, 2008-2017




## APEC demand outlook, 2017-2022



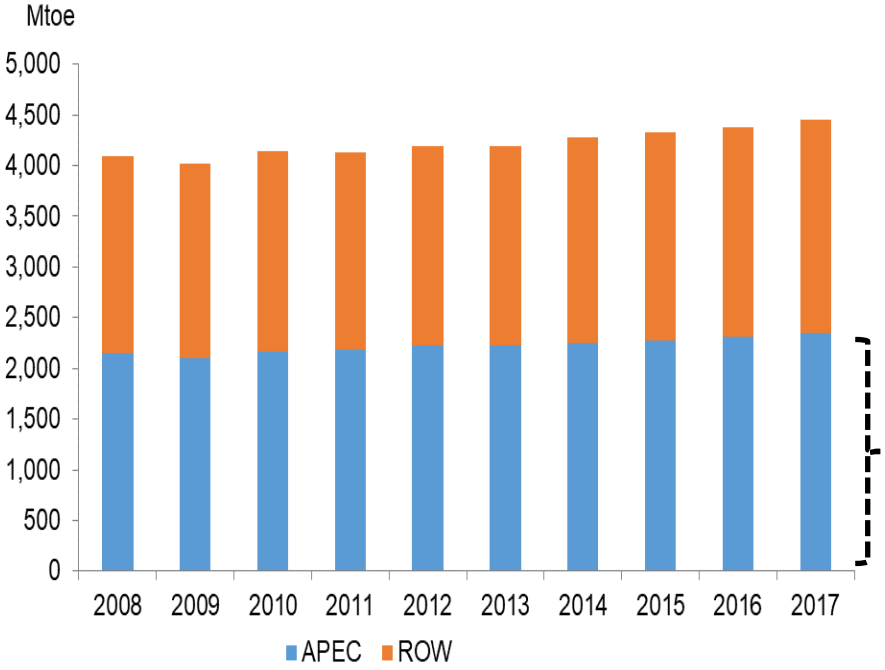

*Source: APERC analysis and IEA 2018*

***China and southeast Asia demand growths are projected to be largest in APEC (1.7% and 2.3% annually towards 2022) contributing to 35% share of APEC.***

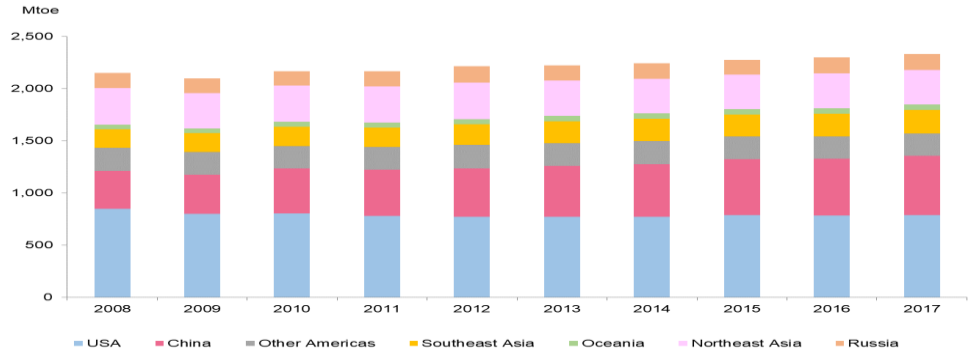
***APEC oil demand will shift more to Asia in the coming years.***

# APEC accounted for 53% of global oil supply in 2017

## APEC versus global supply, 2008-2017




## APEC supply, by region, 2008-2017



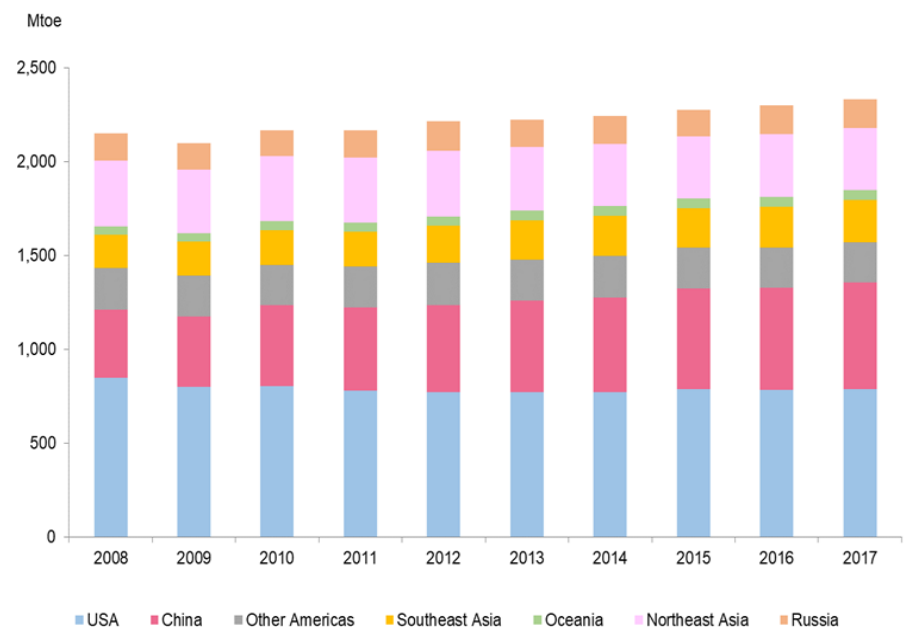

*Source: APERC analysis and IEA (2019)*

***Global oil supply increased faster than demand to reach 4,454 million tonnes in 2017 (0.96% annually).***

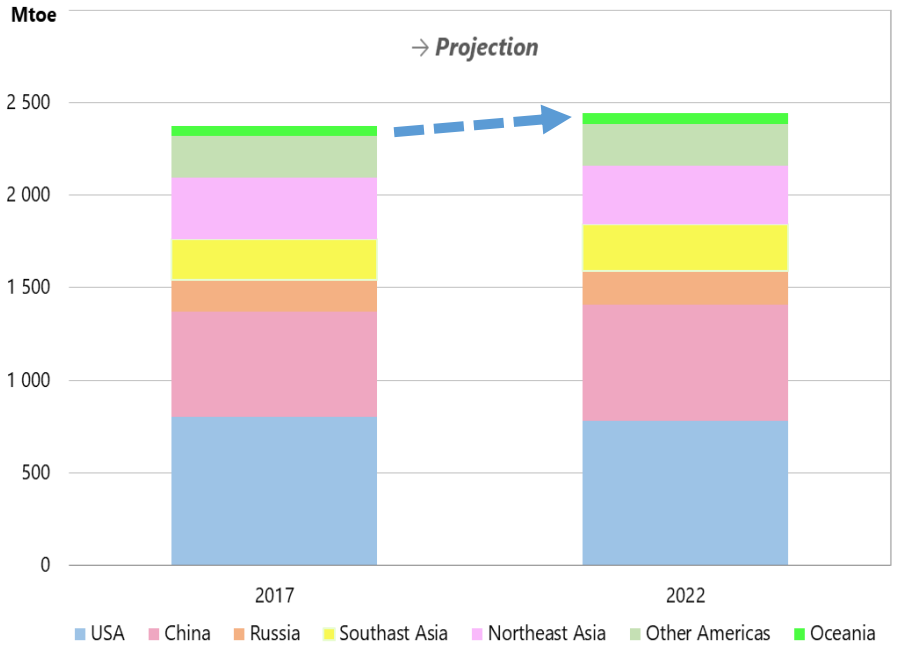
***The U.S. and Russia accounted for 62% of APEC oil production.***

# APEC oil supply continues its growth towards 2022

**APEC supply, 2008-2017**




**APEC supply outlook, 2017-2022**



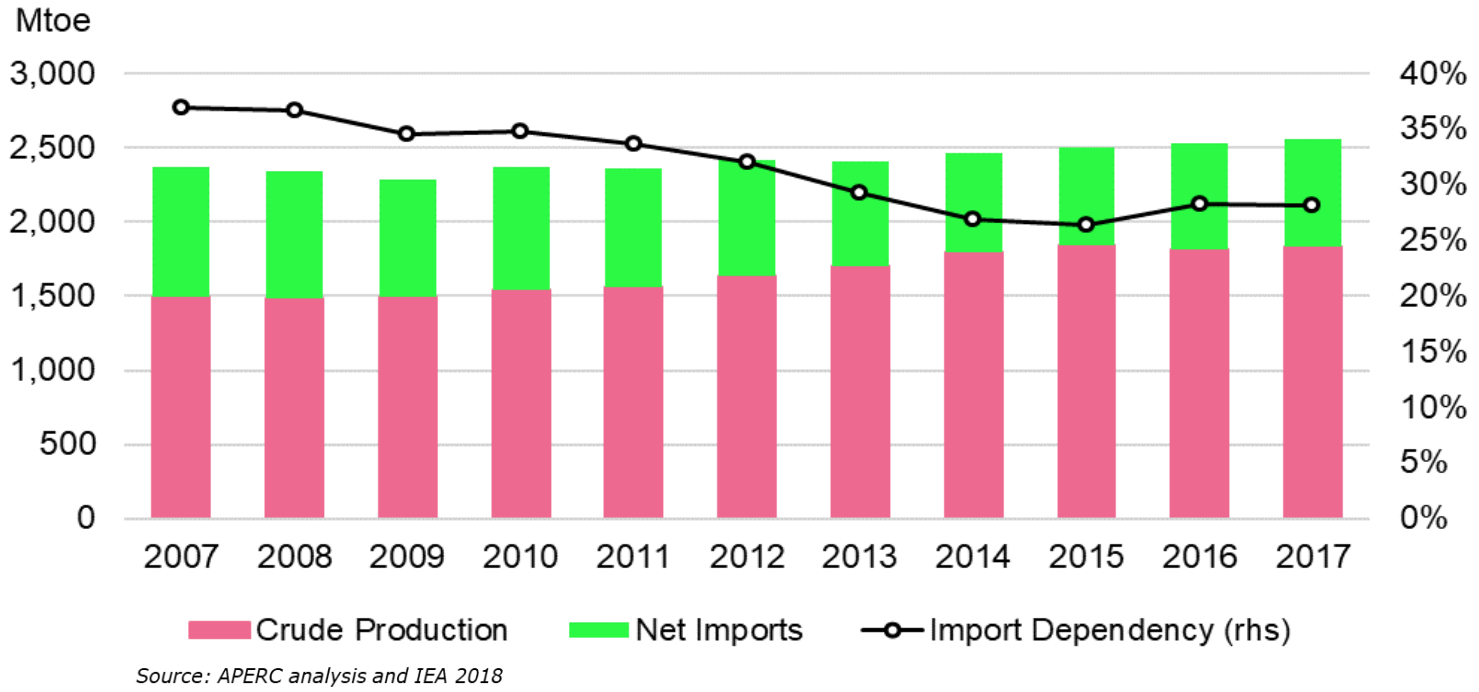

*Source: APERC analysis and IEA 2018*

*Before COVID-19 and the resulting drop in oil prices, APEC oil supply was expected to grow by 0.56% annually to reach 2,467 million tonnes in 2022.*

*The U.S. was expected to increase its production share while Russia lost share. Given the oil demand reductions and lower oil prices caused by the pandemic, U.S. oil production is now expected to decline in 2021 and 2022.*

# APEC crude oil import dependency has improved for the past decade

## APEC crude oil import dependency, 2007-2017



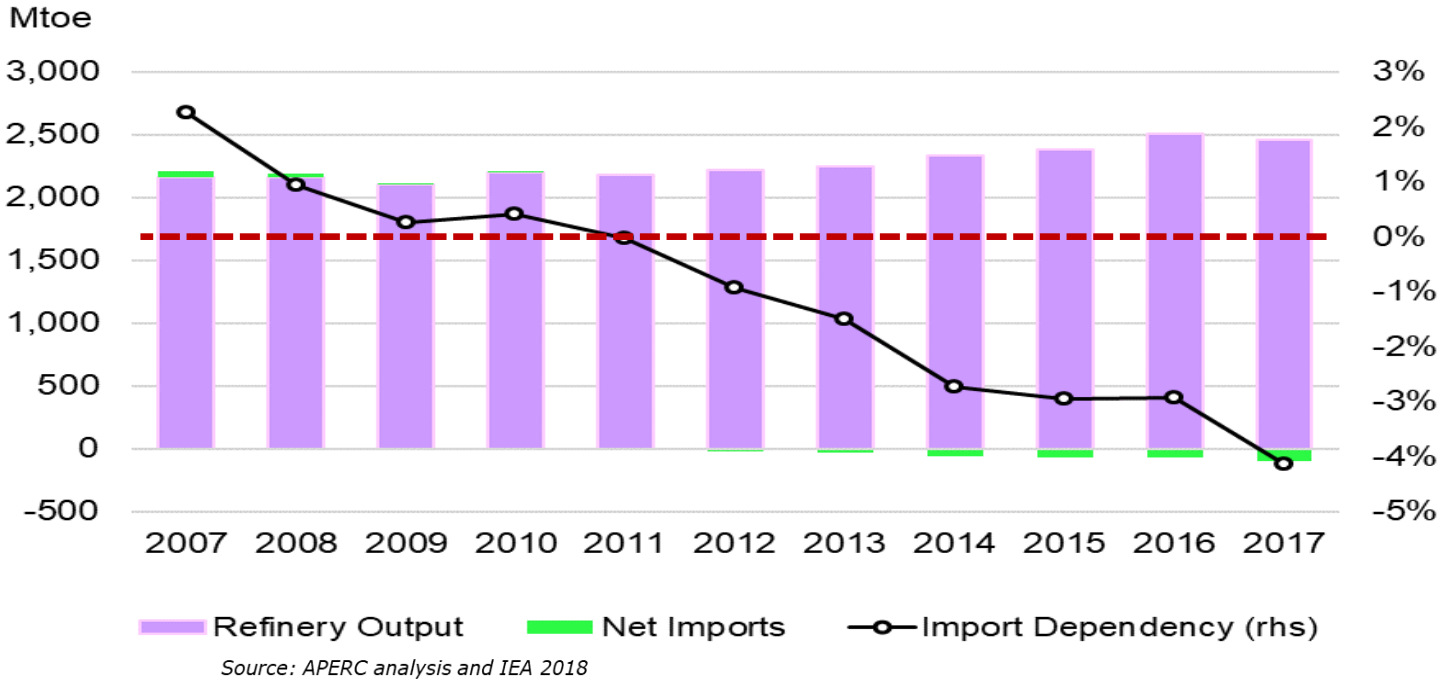

*Source: APERC analysis and IEA 2018*

*Indigenous crude oil production increase by the U.S., Russia, and Canada contributed to APEC better import dependence.*

*Import dependence started to increase in recent years because of the production declines in the U.S. and China along with low crude oil prices.*

# APEC product import dependency has been self-sufficient since 2011

## APEC oil products import dependency, 2007-2017




*Source: APERC analysis and IEA 2018*

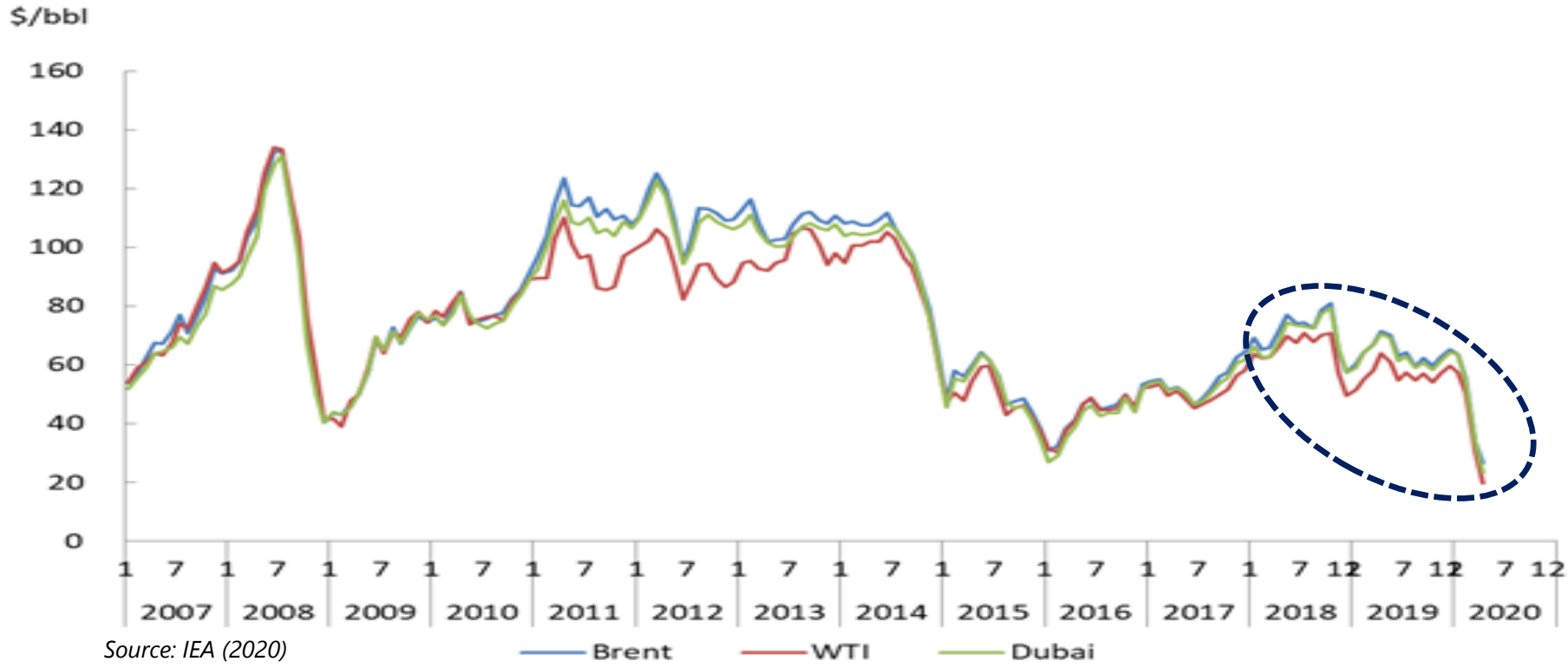
*APEC has been self-sufficient and a net-exporter of oil products since 2011.*

*Massive crude producers like the U.S. and Russia are primarily oil-exporters.*

*On the other hand, Australia and Mexico are highly dependent on imports.*

# Bearish oil sentiment could continue after 2020

## Crude oil prices, 2007-2020



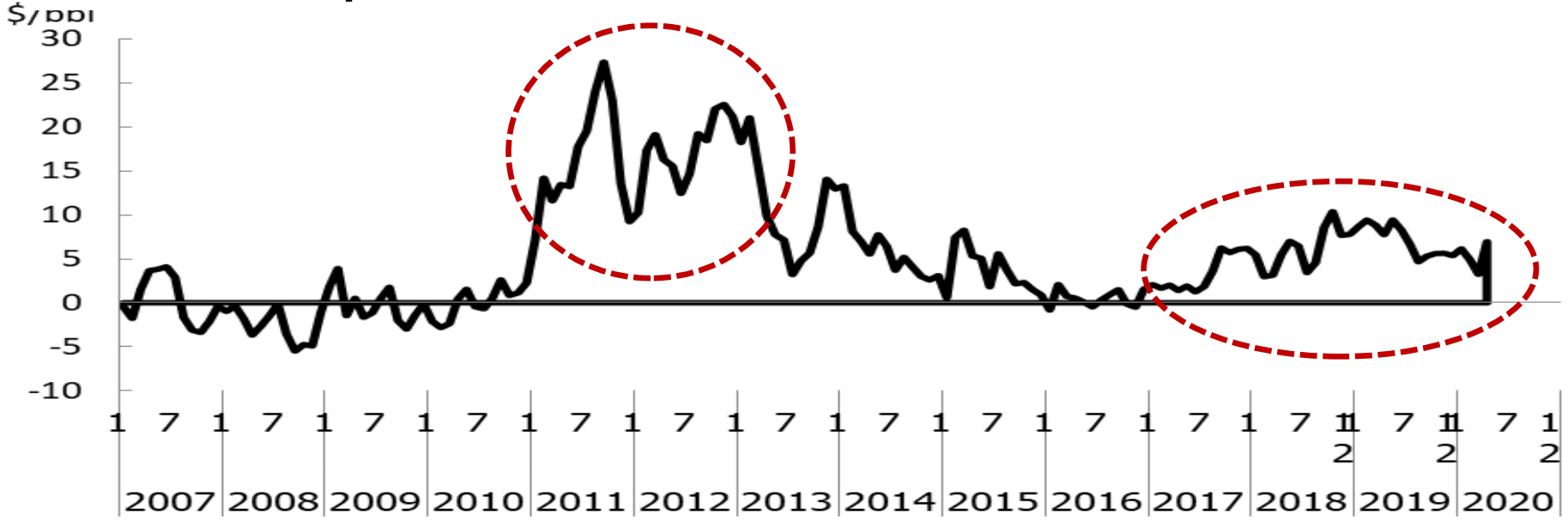

*Source: IEA (2020)*

*Falling oil prices during the past few years were driven by increased shale oil supply and diminished oil demand due to the slowdown in economic growth.*

*In early 2020, COVID-19 quickly caused oil prices to fall even further.*

# Brent-WTI has varied substantially since 2011

## Brent-WTI spread, 2007-2018




Source: IEA (2020)

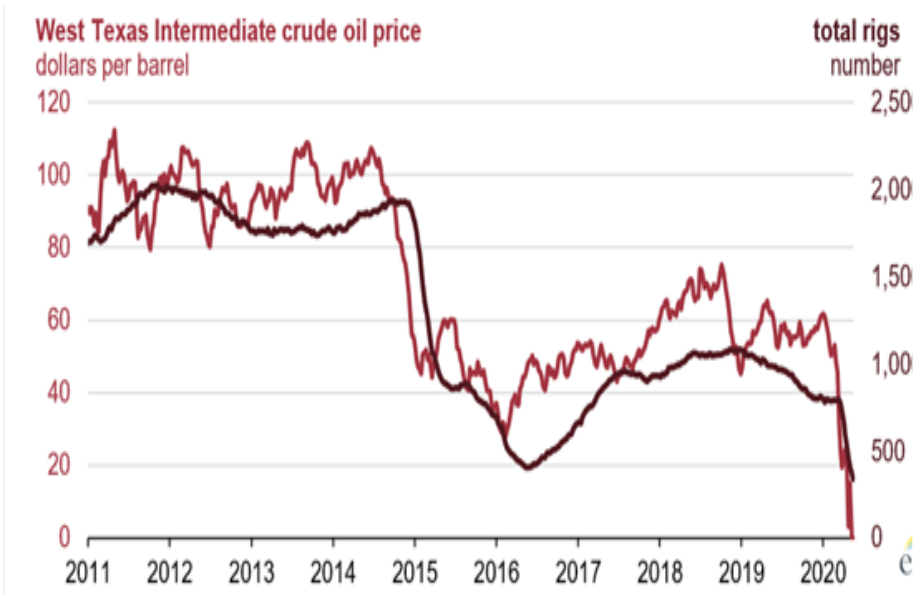
*The Brent-WTI spread in 2011-2013 is largely explained by a build-up of crude oil stocks in the U.S. (shale revolution/limited takeaway capacity) and Arab Spring.*

*Brent-WTI spread once again has fluctuated since 2017 because of temporary shortage of pipelines to carry oil out of the Permian basin in West Texas, U.S.A.*

*The pipeline bottleneck was relieved in 2020 by a combination of new pipeline capacity and reduced oil production in the Permian Basin.*

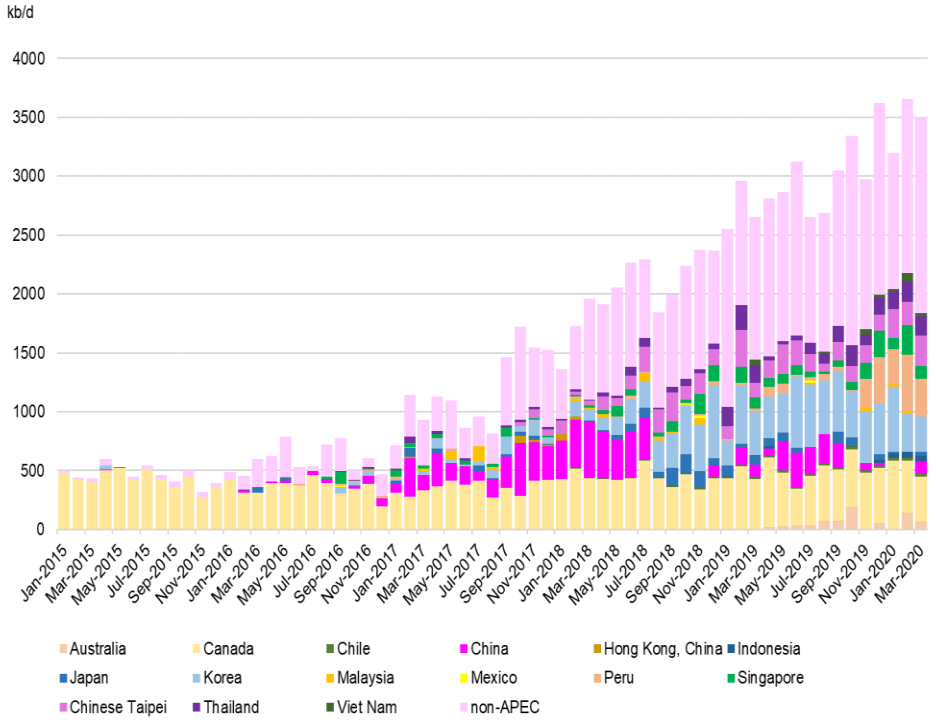
# U.S. shale oil production increases and influences crude price down

## WTI price and total rig count, 2011-2020




*Source: Statista (2017)*

## US crude exports, 2015-2020



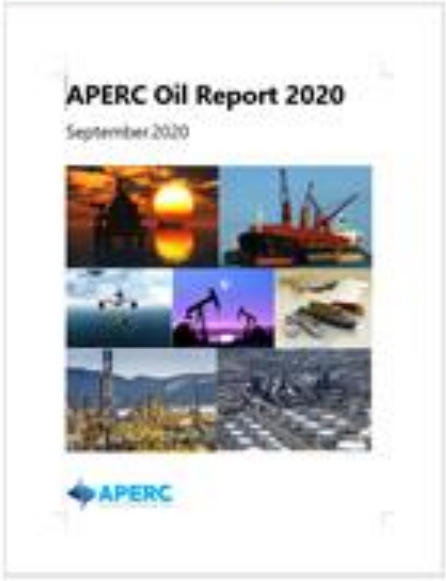

*U.S. crude oil production in 2019 hit 12.2 mb/d with the number of operating rigs hovering around 1,000 and its export increased to 3.0 mb/d.*

*Given the reduced demand for oil and resulting low oil prices, EIA projects that U.S. crude oil production will fall to 11.4 mb/d in 2020 and 11.1 mb/d in 2021.*

# Thank you for your kind attention

https://aperc.or.jp/

https://aperc.or.jp/file/2020/9/28/APERC_Oil_Report_2020_v8+-20200925.pdf

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