Covid-19 and Fuel Economy Regulation: Oil and Vehicle Market Implications

USAAEE Webinar
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Unprecedented 20-30% shock to oil demand

With over 4 billion people under lockdown measures, April, 2Q experienced worst demand destruction

Including large contraction in aviation and gasoline

Source: BP (history), IEA (forecast)
Now, transportation fuel demand is gradually rebounding

High frequency indicators showing only moderate improvement...

...and refineries are managing the shift in products needed

Road Congestion - Americas
(% deviation from year ago)

Source: TomTom

Product Supplied Finished Motor Gasoline

Product Supplied Kero Type Jet Fuel

Source: EIA
Transportation plays a prominent yet diminishing role

60% of liquids consumption from transportation fuels

But the growth comes from non-combusted fuels

Liquids demand

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<th>Mb/d</th>
<th>Power</th>
<th>Industry</th>
<th>Non-combusted</th>
<th>Non-road</th>
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Liquids demand growth

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Cars include 2- and 3-wheelers. Trucks includes most SUVs in North America. Non-road includes aviation, marine and rail.
Wide variability in oil demand scenarios

Covid-19 will require review of transportation efficiency, technology and policy assumptions which already led to a wide range of oil demand pathways

Jet/kero demand forecast to account for majority of refinery product supplied

Demand and supply growth by product, 2017-2040

Source: BP Energy Outlook 2019
Short/Medium/Long term effects on transportation

Low fuel price, wealth shock to act as headwind to fuel economy improvement

Breakout of US VMT shows significant risk of lower fuel demand

Fuel economy chg of new cars sold

Real Oil Price ($/bbl)


-4% -2% 0% 2% 4% 6% 8%

Aggregate Sales (mpg) Real Oil Price (1yr Lag)

2017 NHTSA: Share of VMT

Home based, 36%

Work related, 21%

Medical/Dental services, 2%

School/Daycare/Religious activity, 3%

Social/Recreational, 11%

Shopping/Errands, 15%

Meals, 5%

Transport someone, 7%

Something else, 2%

Source: TSE, EPA, MarketView

Source: NHTSA, ORNL