

易贸国际烯烃会议，中国惠州

杨荣发 普氏石化组

高级编辑

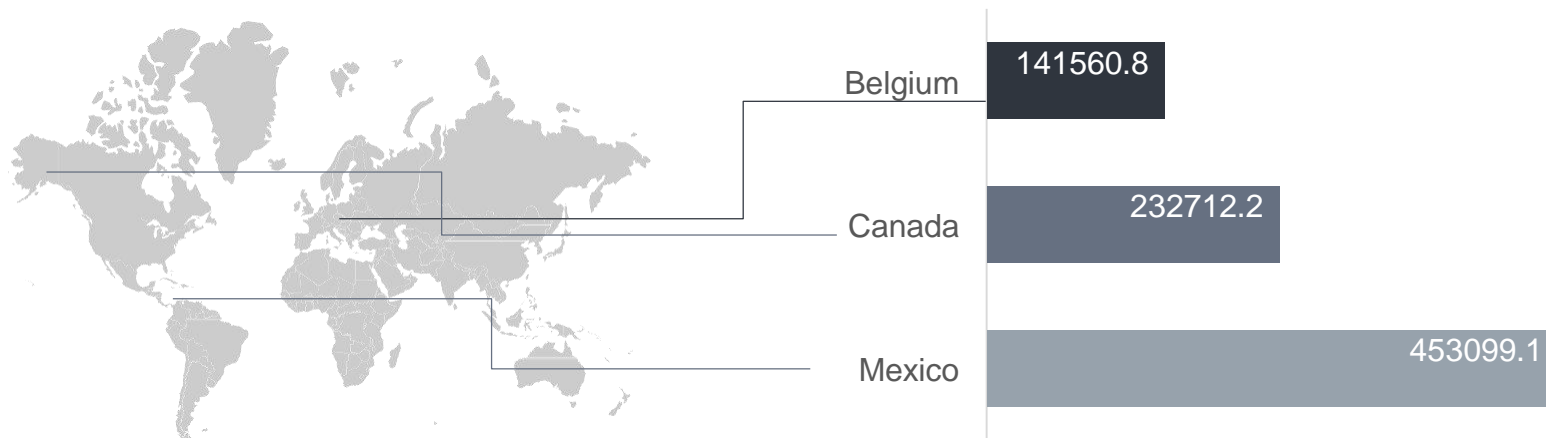
主要分析项目:

- 北美和中东聚合物行业的发展和扩展，以及贸易趋势分析
- 中国烯烃市场发展趋势和近期动态
- 上游烯烃的发展对聚烯烃的影响

- 北美和中东聚合物行业的发展和扩展，以及贸易趋势分析

贸易冲突导致长期需求呈现不确定性

- 下游商品受影响，导致树脂采购谨慎
- 中国要求减少
- 一些美国原产品地通过交易袋来重新改变贸易走向-由原本运往中国的美国货物现在运往中国以外的地区，实现了地点互换即中东、印度、东南亚等

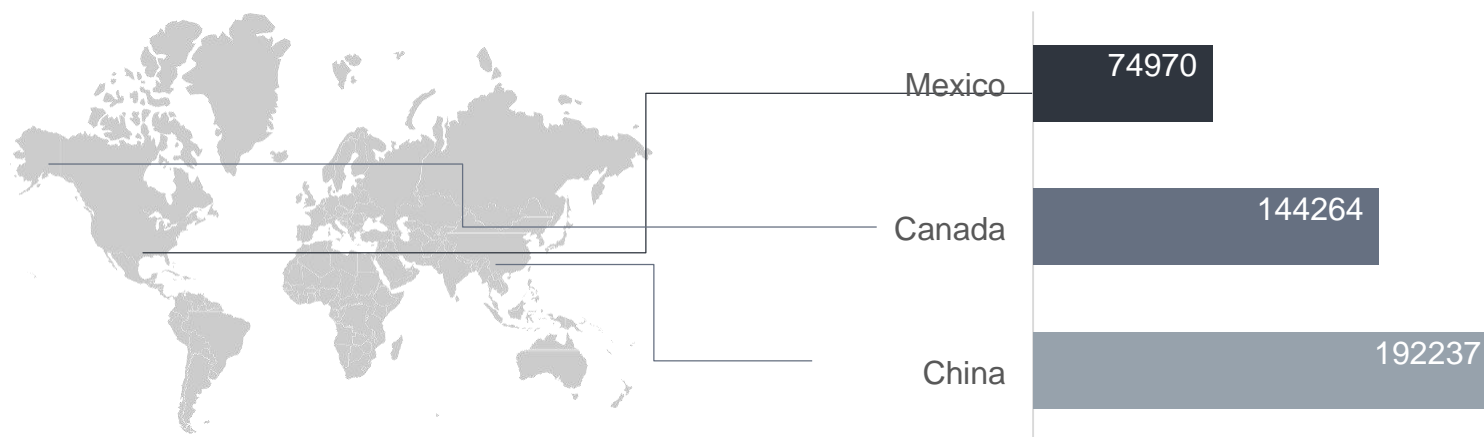


US HDPE goes to

Source: USITC,
Jan-Aug, Units
:mt

美国的低密度聚丙烯将何去何从？

- 中国将在2019年取代墨西哥和加拿大成为最大进口国，但一旦年底征收税收，这种情况可能会改变
- 从更长远的前景来看，关税提高继续推动中国转炉企业向东南亚转移
- 根据分析，全球需求增长可能会减弱12%
- 下游投资环境更为审慎

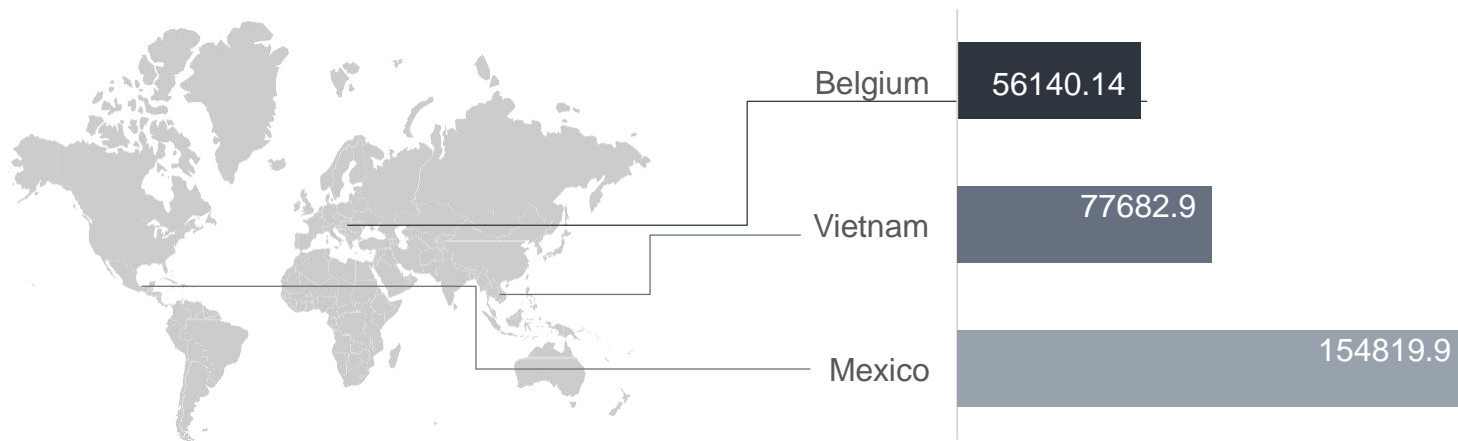


US LDPE goes to

Source: USITC,
Jan-Aug, Units :mt

美国出口到越南的低密度聚丙烯出口猛增

- 越南成为美国低密度聚丙烯的第二大进口国，增长超过1000%
- 大部分出口到拉丁美洲和欧洲
- 中国排名第四的低密度聚丙烯进口商，主要是转口制成品的加工地点

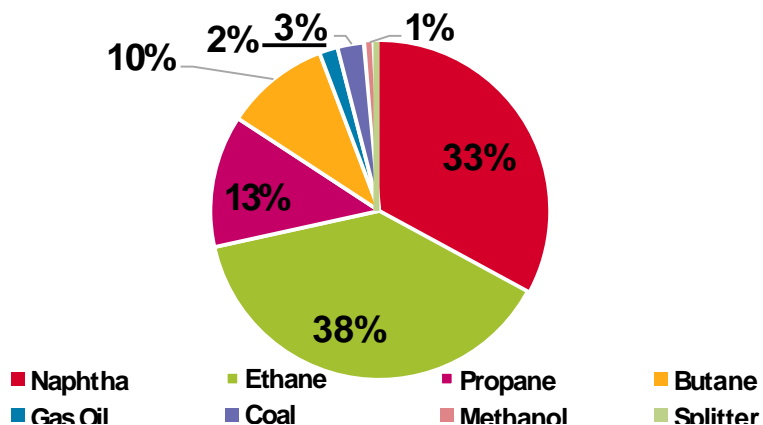


US LLDPE goes to

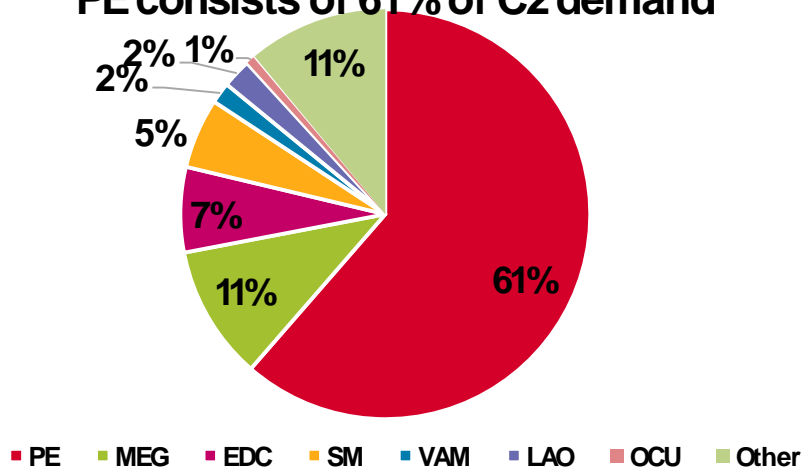
Source: USITC,
Jan-Aug, Units
:mt

乙烷取代石脑油成为PE的主要原料，聚丙烯对丙烯的需求增加

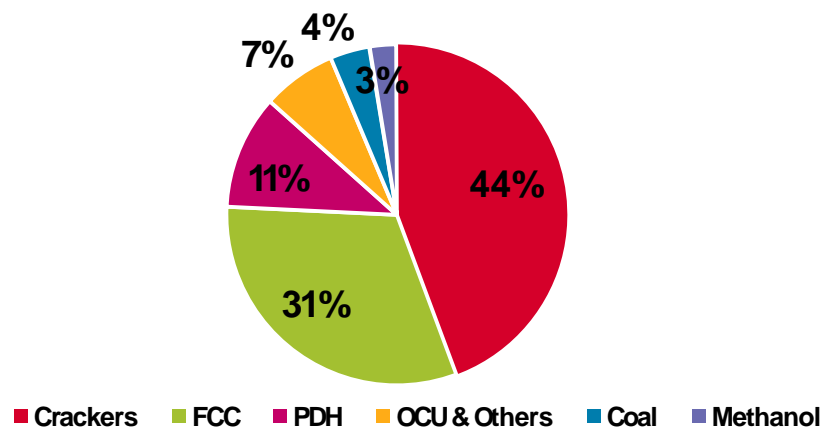
Polyethylene



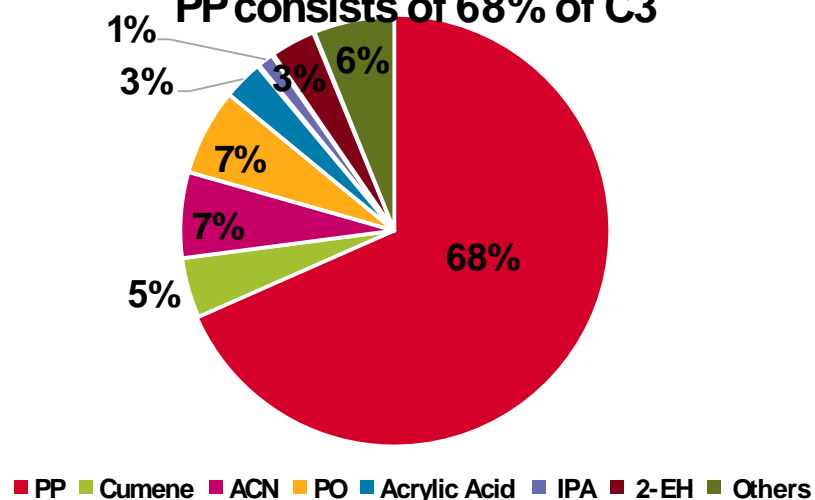
PE consists of 61% of C2 demand



Polypropylene



PP consists of 68% of C3



前往亚洲的全球LLDPE供过于求



2019 Polyethylene



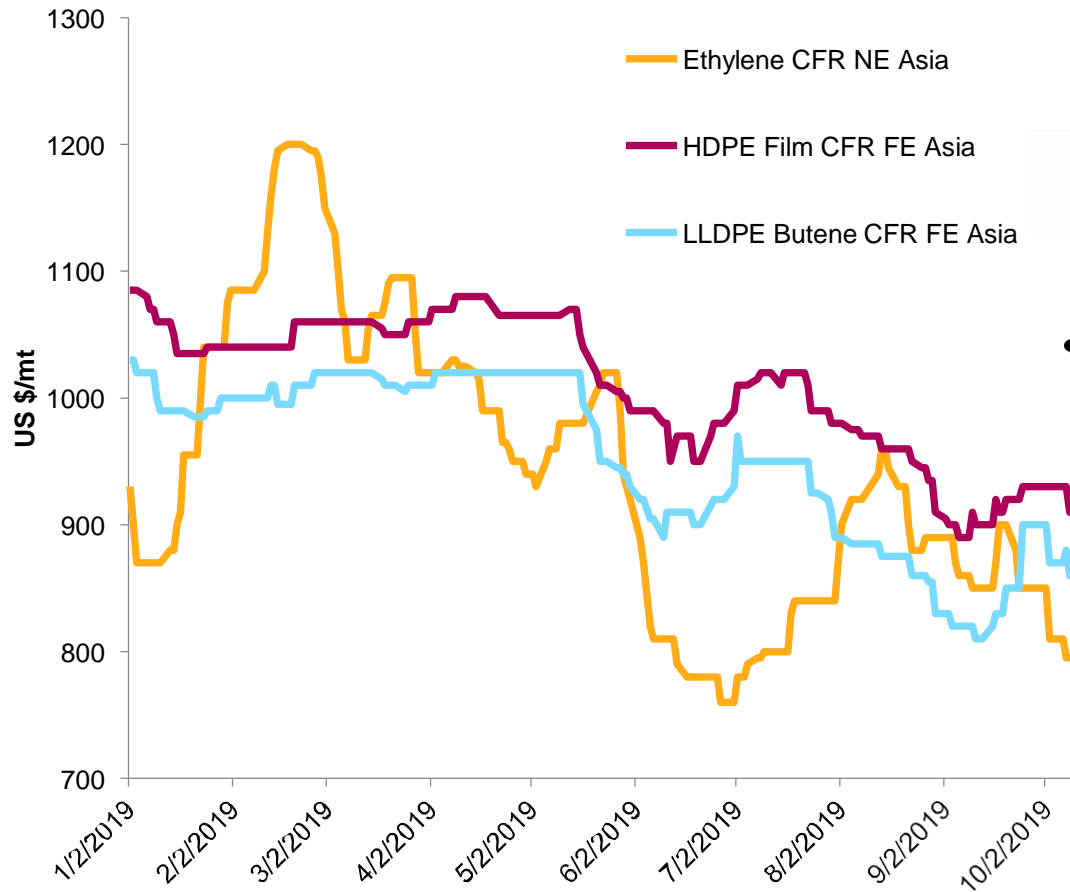
Supply (estimated)
~2 mil mt/yr in Asia to start
by end 2020, ~3-4 mil
mt/year globally*



Feedstock composition-
Coal based expansions
to slow



Demand deficit at 14- 15
mil mt/year, mainly HDPE



10
year
low

到2020年，亚洲的PE净赤字增加至1400万吨/年，其中大部分为高密度聚丙烯



- SE Asia will export more LLDPE (likely to China)
- Low cost polymer manufacturing moved to cheaper labour areas (Myanmar, Cambodia emergence)
- Long term: China's Belt Road initiative

亚洲PP供不应求，尤其是南亚

2019 Polypropylene



Supply (estimated)
~3 mil mt/year to start by
2020



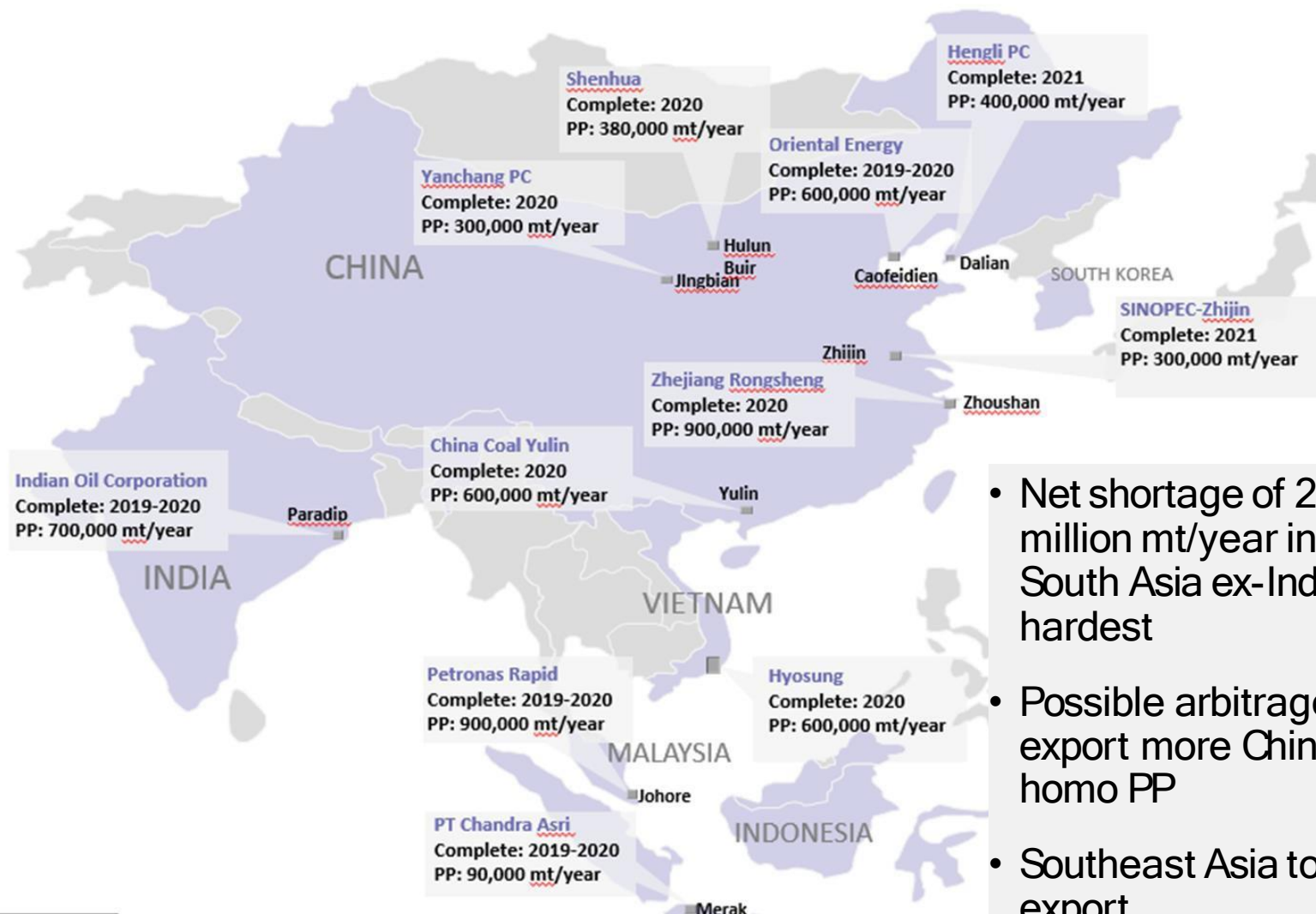
Feedstock composition-
FCC and cracker based
PP falls, PDH based PP
increases



Demand- Deficit of 2 mil
mt/year

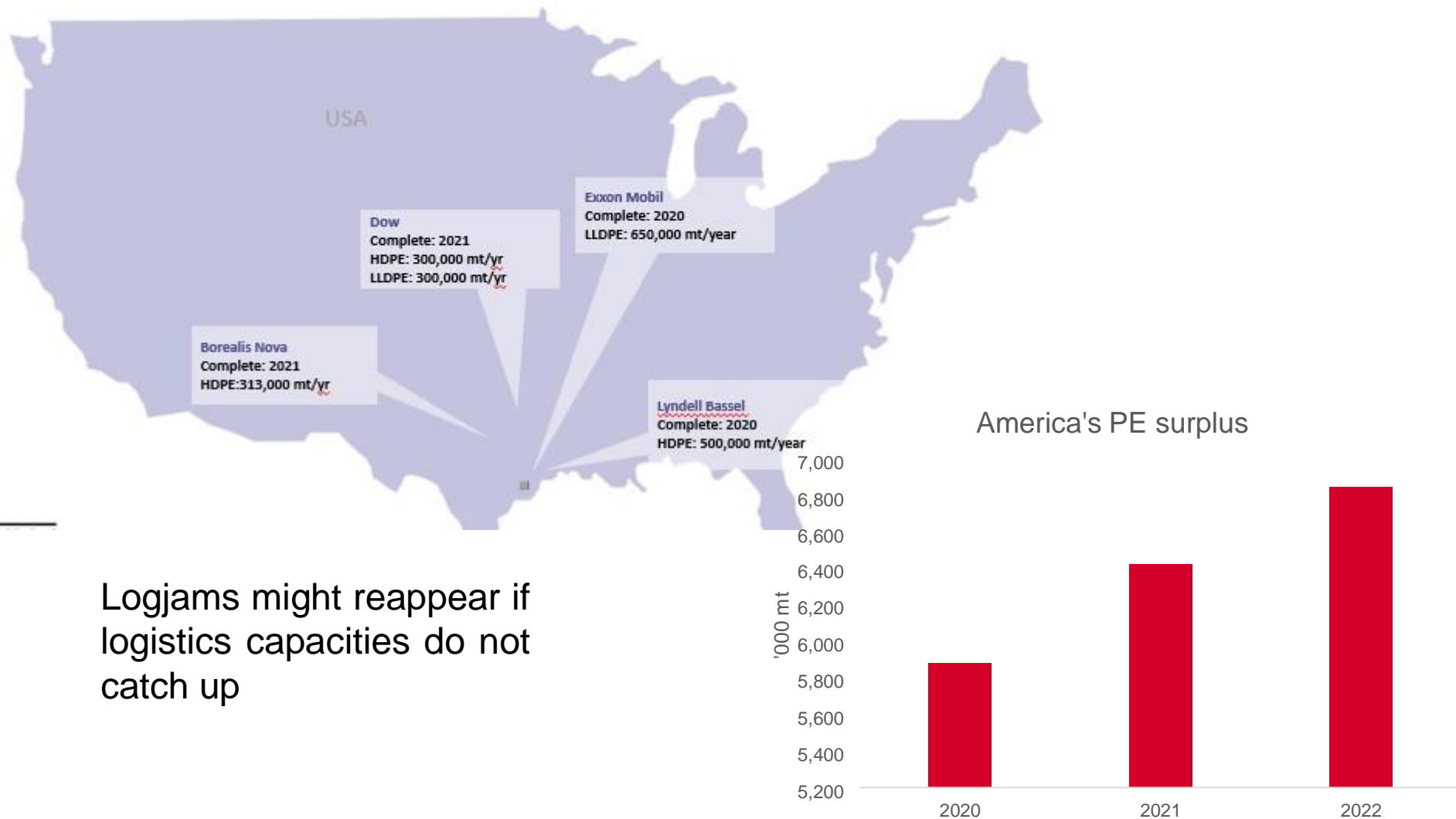
PP
historical
low

尽管每年新增产能3-4百万吨，但亚洲共聚物PP供应仍将保持紧张



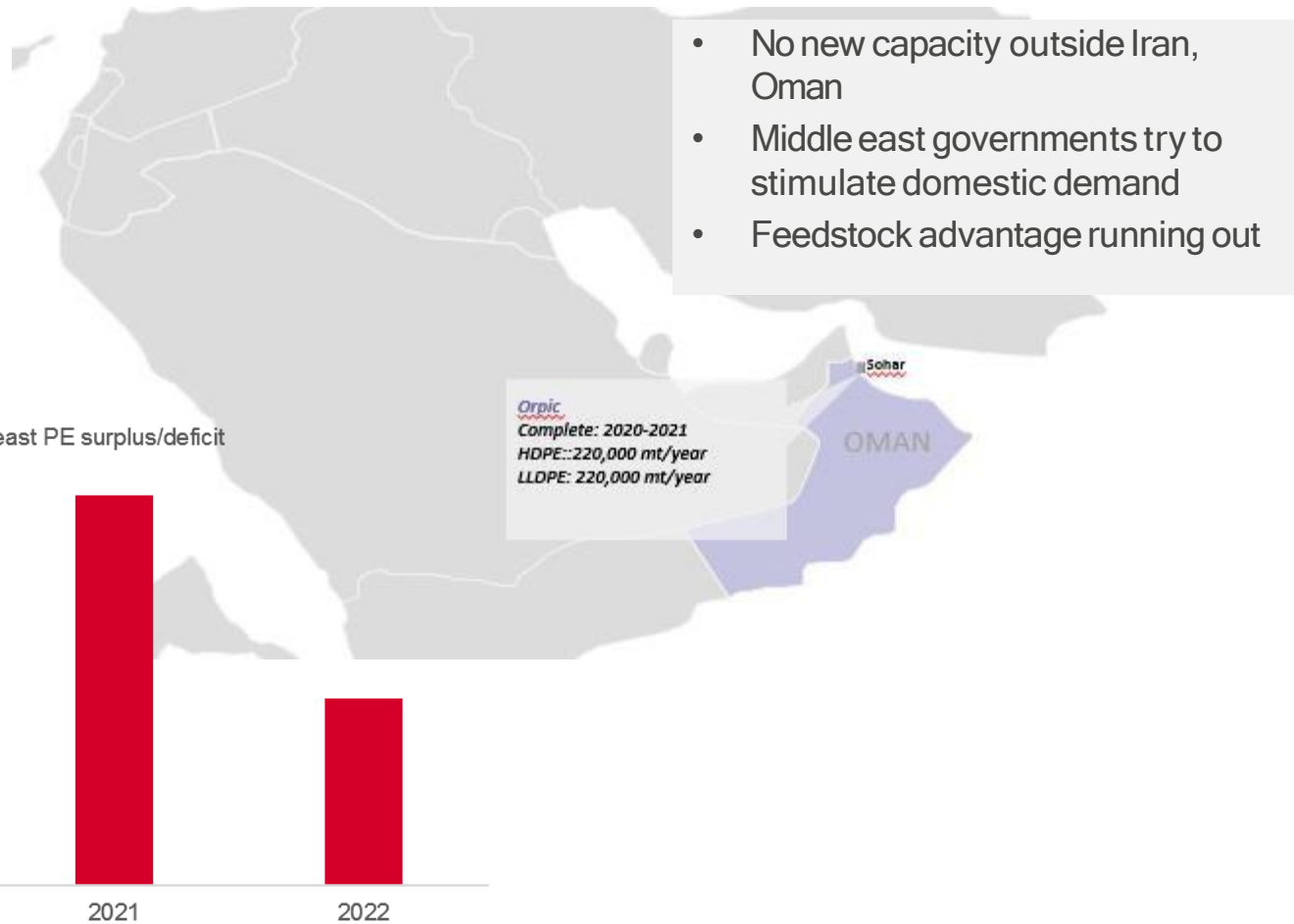
- Net shortage of 2 million mt/year in Asia; South Asia ex-India hit hardest
- Possible arbitrage to export more Chinese homo PP
- Southeast Asia to export

2020年美国PE浪潮仍在继续，每年盈余约500万吨

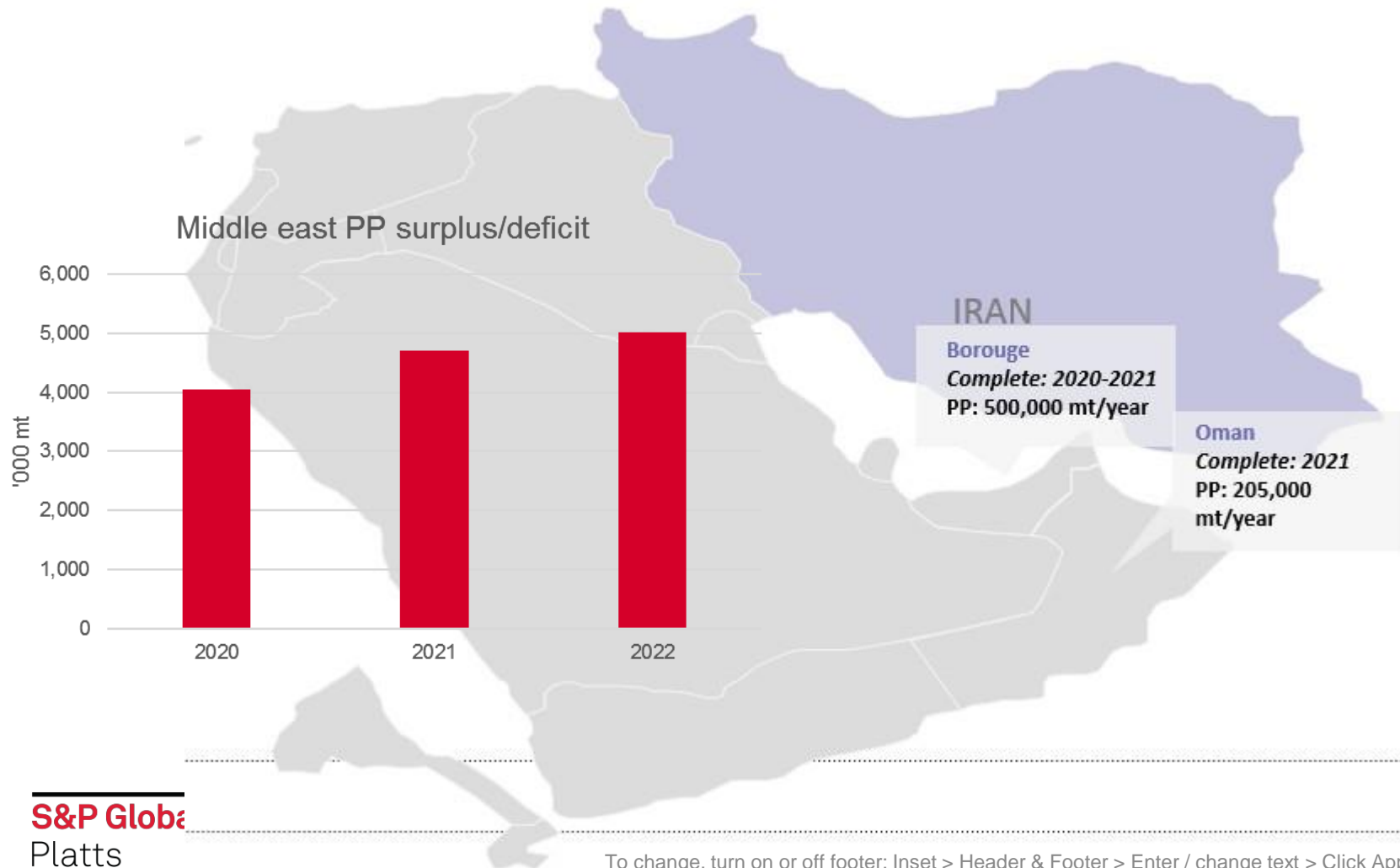


Logjams might reappear if logistics capacities do not catch up

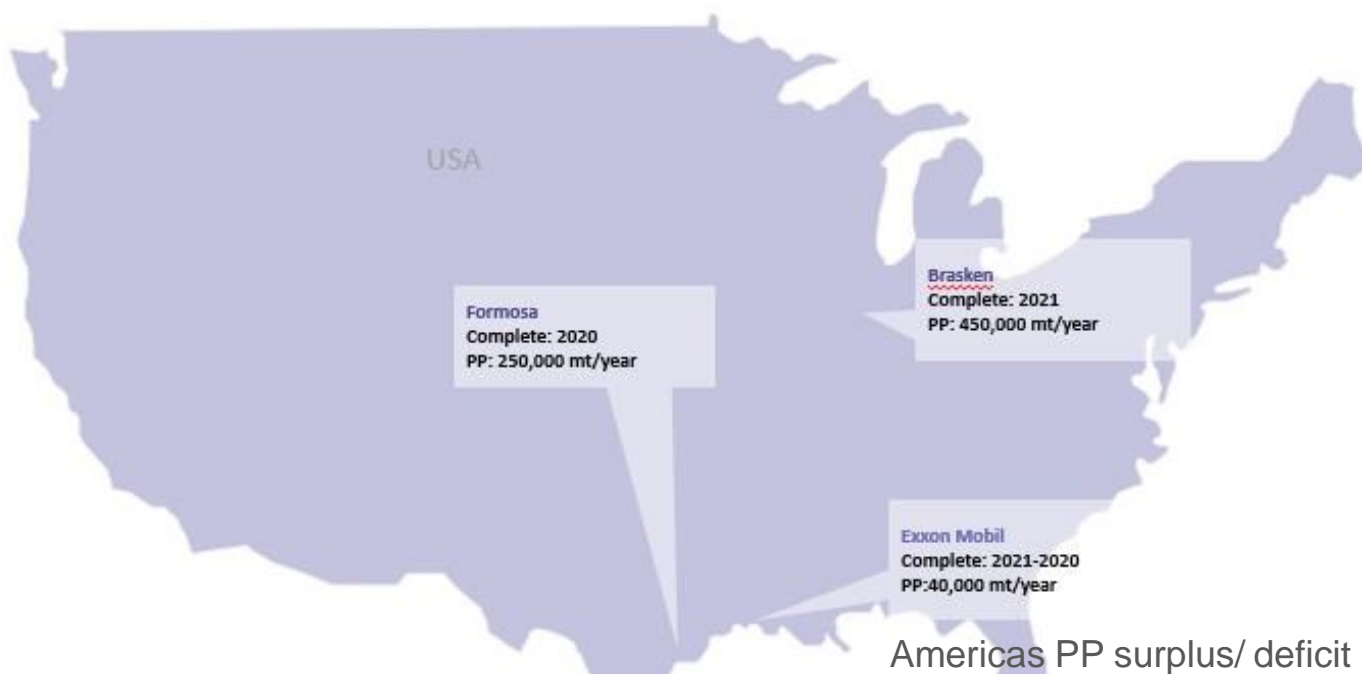
中东PE商品等级将最终趋向多样化



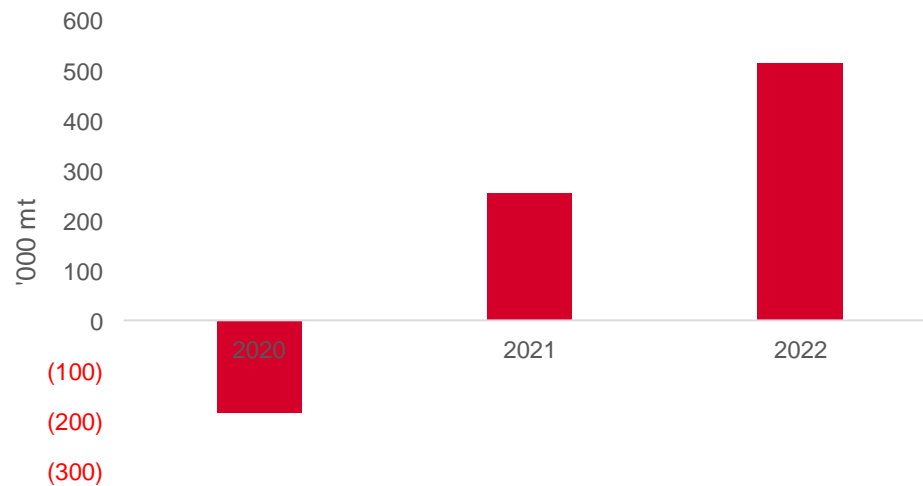
中东2020年PP过剩供应估计为400万吨/年



2020年美国PP净赤字减少

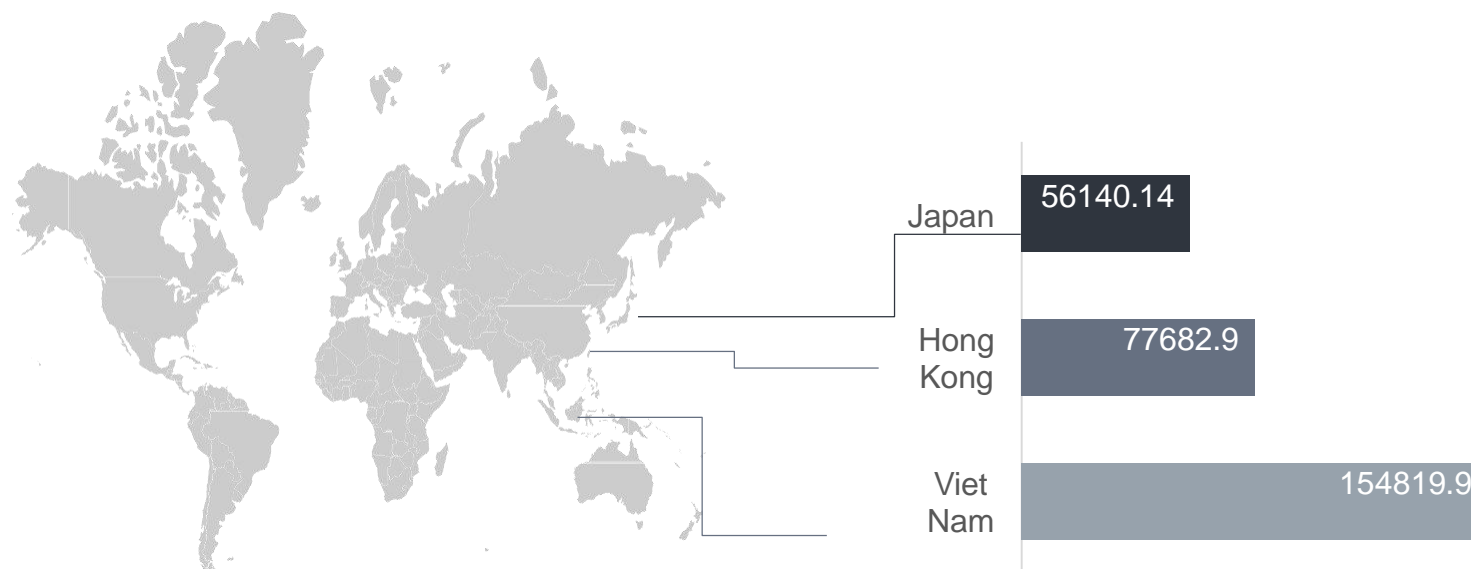


US may turn net exporter in 2021



亚洲在南亚的PP供应呈现净赤字

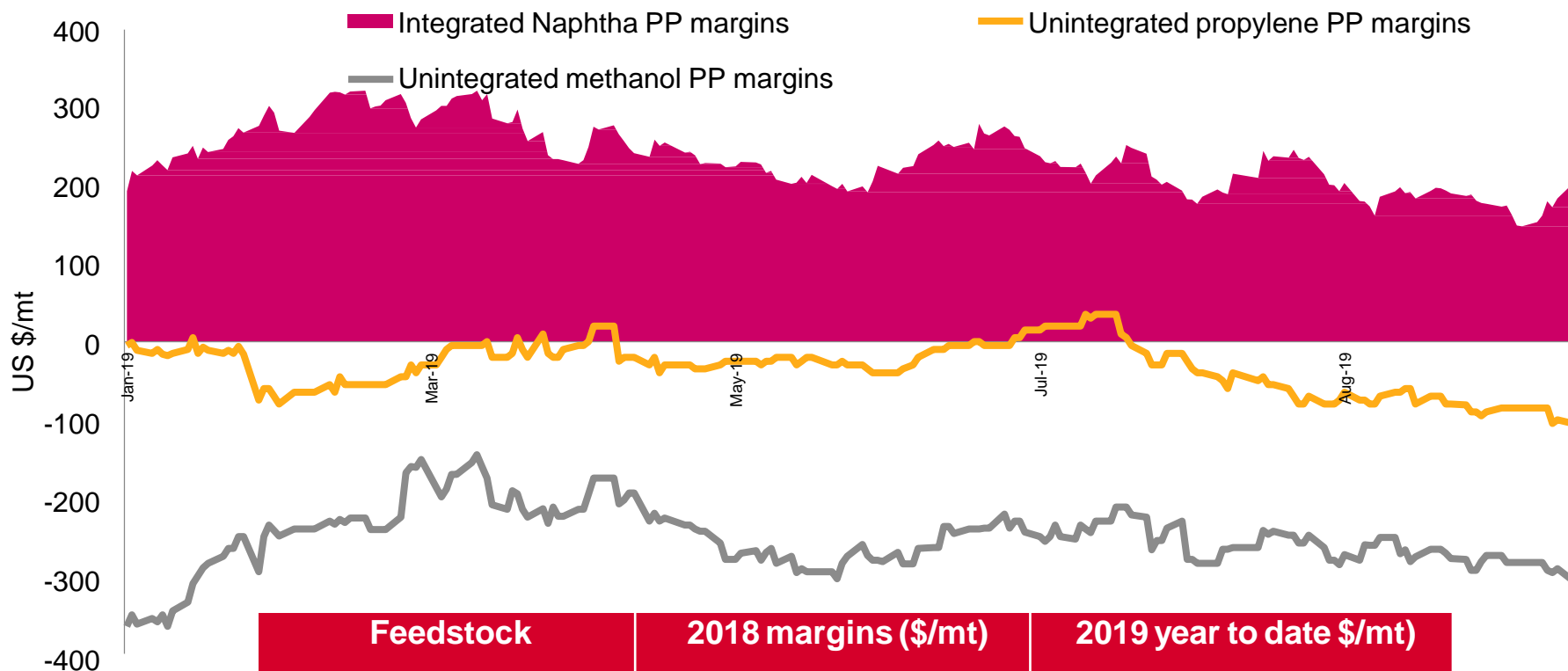
- 随着中国变得更加自给自足，对香港的PP出口增长了3倍，而（同质）进口下降
- 更多PP货源将进入南亚
- 东南亚将成为出口区域



China PP exports goes to

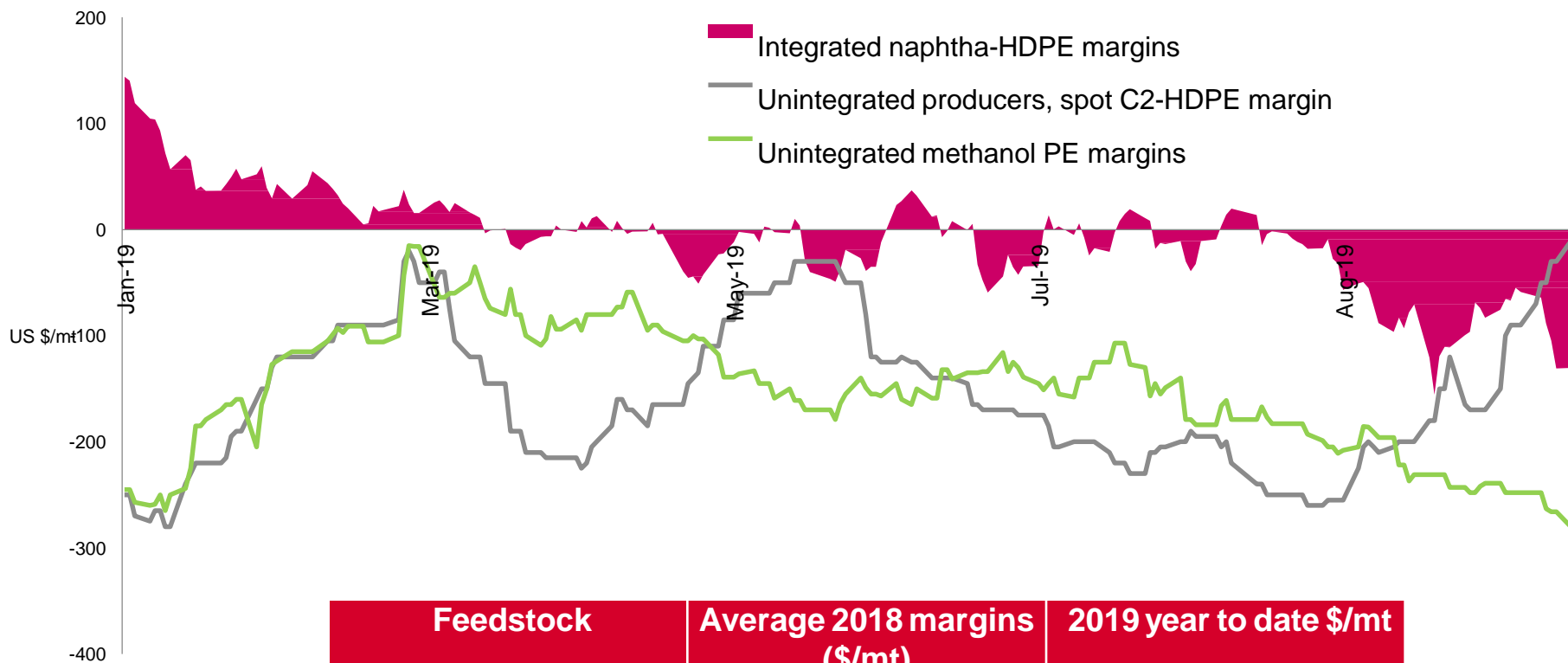
Source: USITC,
Jan-Aug, Units
:mt

亚洲聚丙烯综合利润率短期内不太可能转为负数



Feedstock	2018 margins (\$/mt)	2019 year to date \$/mt)
Naphtha (using rough conversion of \$350- 400/mt)	235	181
Methanol (using a rough conversion cost of \$200/mt)	-231	-40
Propylene	-32	-30

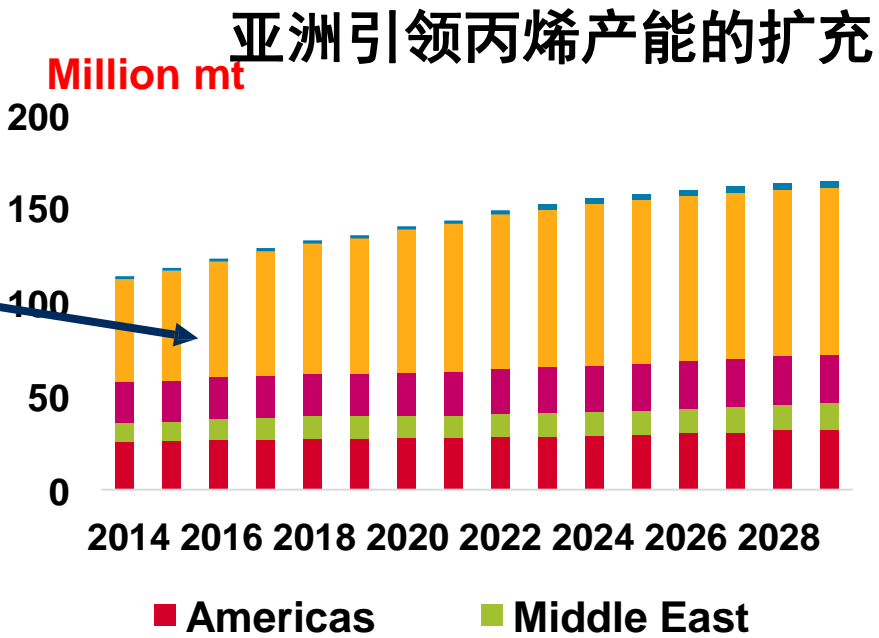
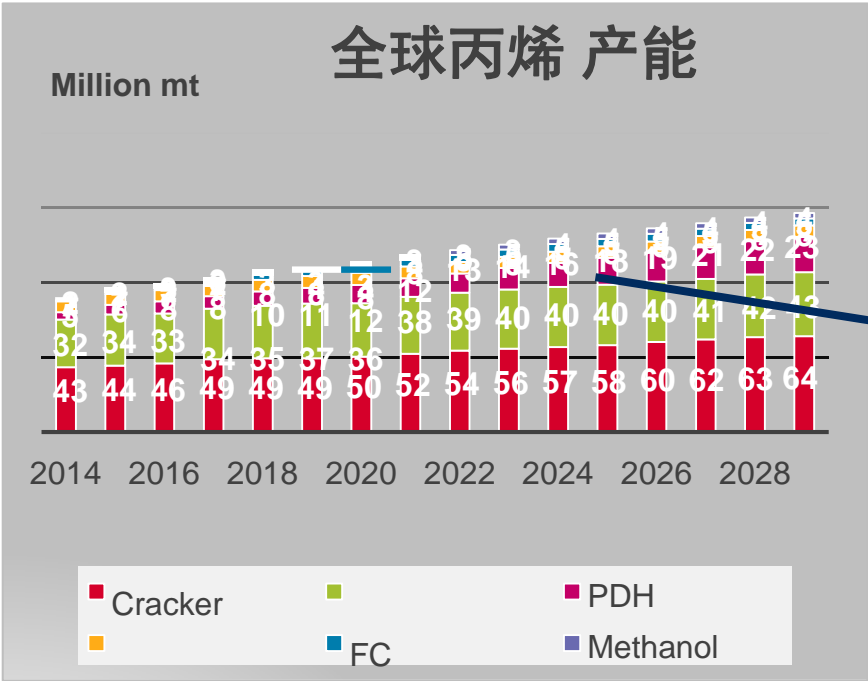
亚洲石脑油-聚乙烯利润率下降，但预计在2020年仍将持续盈利，但未整合生产商的前景喜忧参半



Feedstock	Average 2018 margins (\$/mt)	2019 year to date \$/mt
Naphtha	173	-9
Methanol	-148	-85
Ethylene	-117	-80

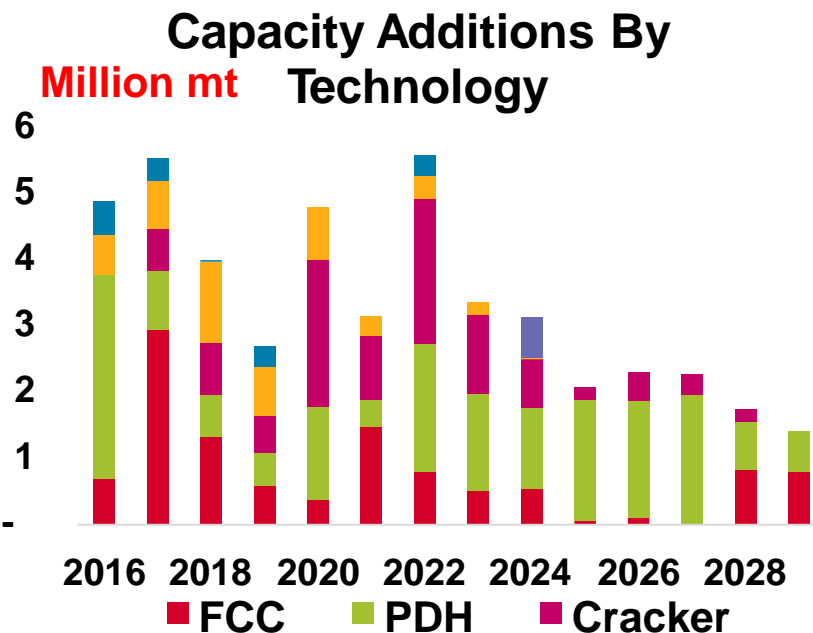
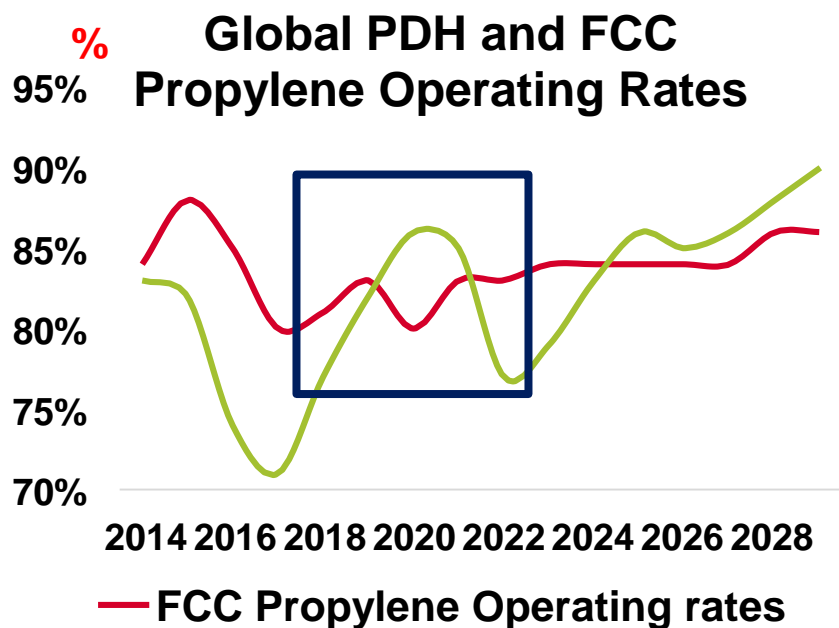
•中国烯烃市场发展趋势和近期动态

轻质裂化的增加导致亚洲和美洲出现了更多的专用丙烯生产，主要是丙烷脱氢装置、丙烷脱氢反应和甲醇制烯烃



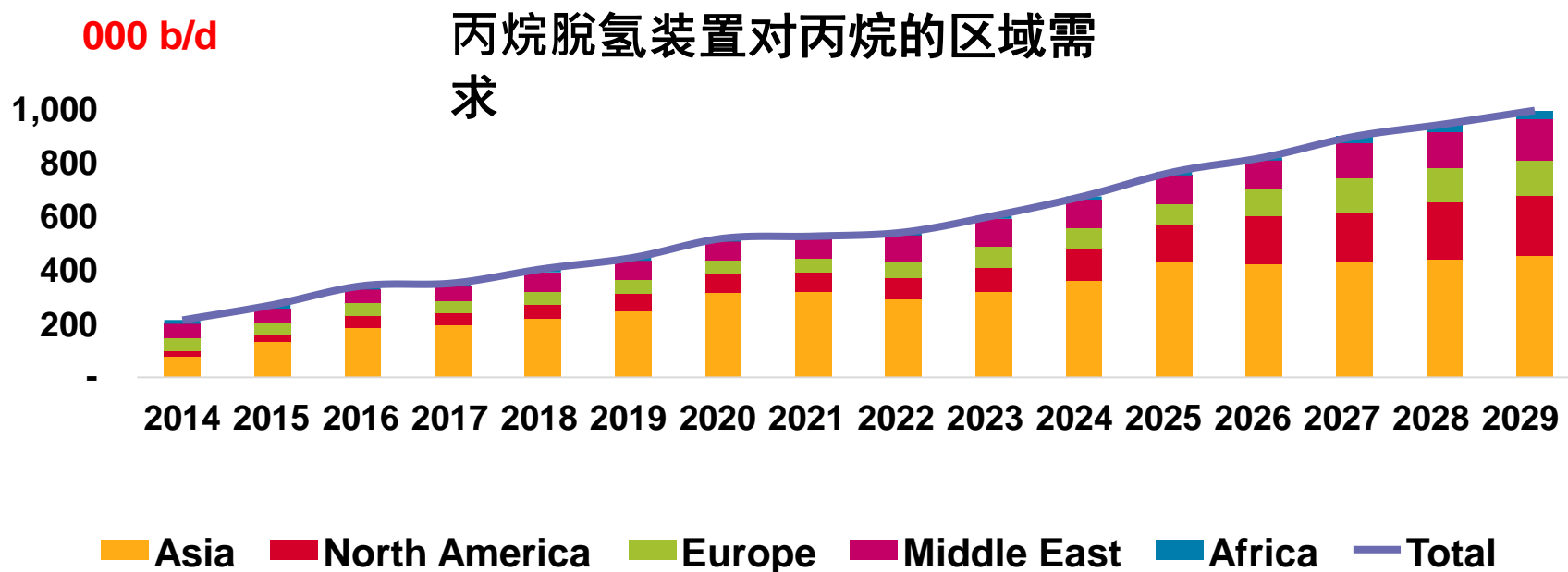
Source: S&P Global Platts Analytics

利用更便宜的丙烷，丙烷脱氢装置开工率将在2019年下半年和2020年开始增加。 由于IMO 2020炼油厂产量变化，FCC丙烯供应将在此期间减少



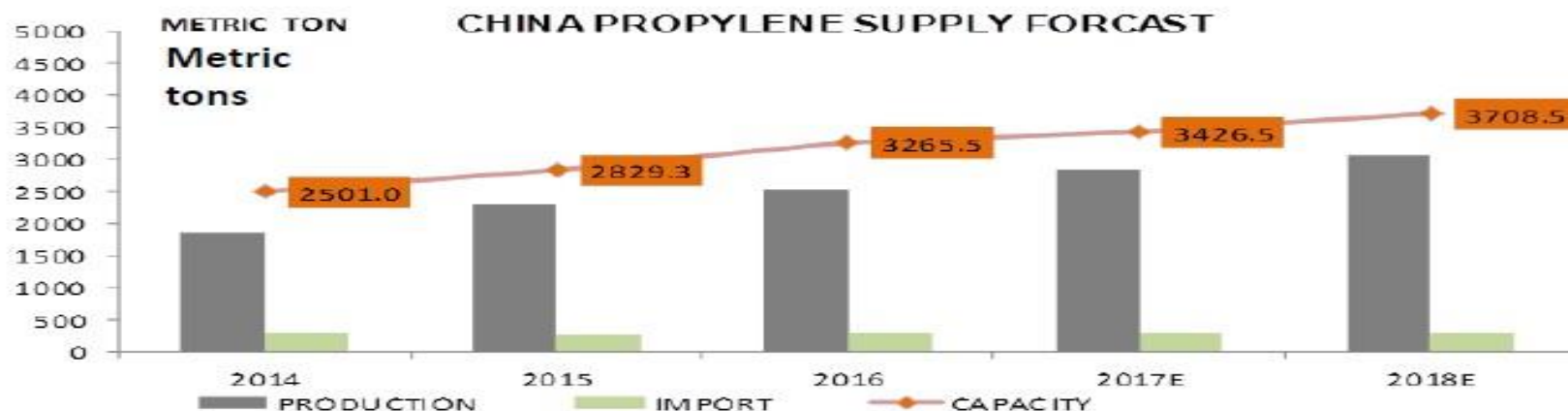
Source: S&P Global Platts Analytics

亚洲在丙烷脱氢装置产能增加方面处于领先地位。随着更多USGC和新的加拿大丙烷脱氢装置项目上线，北美将紧随其后。



Source: S&P Global Platts Analytics

中国——预计的丙烷脱氢装置净增长



New Projects	Capacity(Kt)	Projected Start Operation
Fujian Meide PDH	750	End of 2018
Satellite PDH	450	End of 2018
Zunpeng Energy PDH	300	End of 2019
Juzhengyuan PDH	600	End of 2019
Oriental Energy PDH	660	End of 2019
Yangpu Aoli PDH	300	End of 2019
Xuzhou Haitian PDH	600	End of 2020
Wanhua Ethylene Project	1,000	End of 2019
Panjin North Asphalt	1,000	End of 2019

■ Chinese domestic propylene supply is projected to increase along with PDH capacity

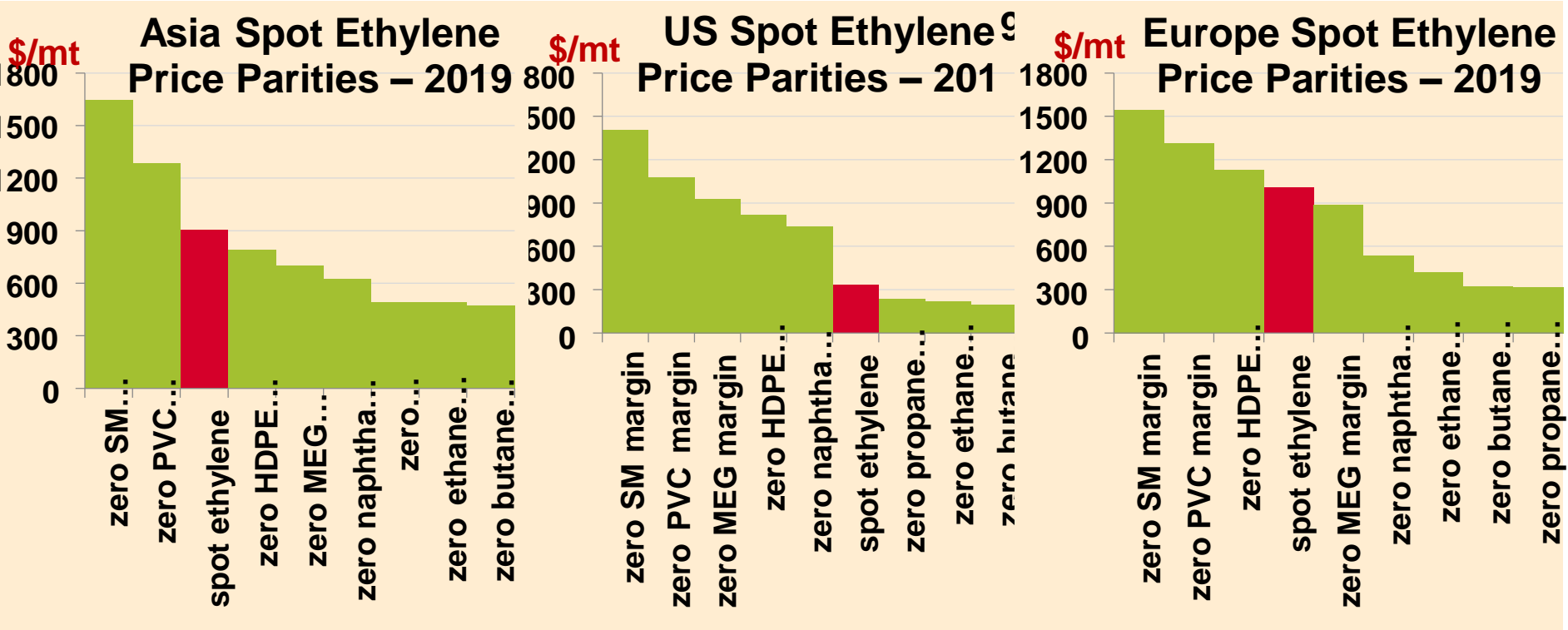
Source: Wanhua Petrochemical

China PDH Projects



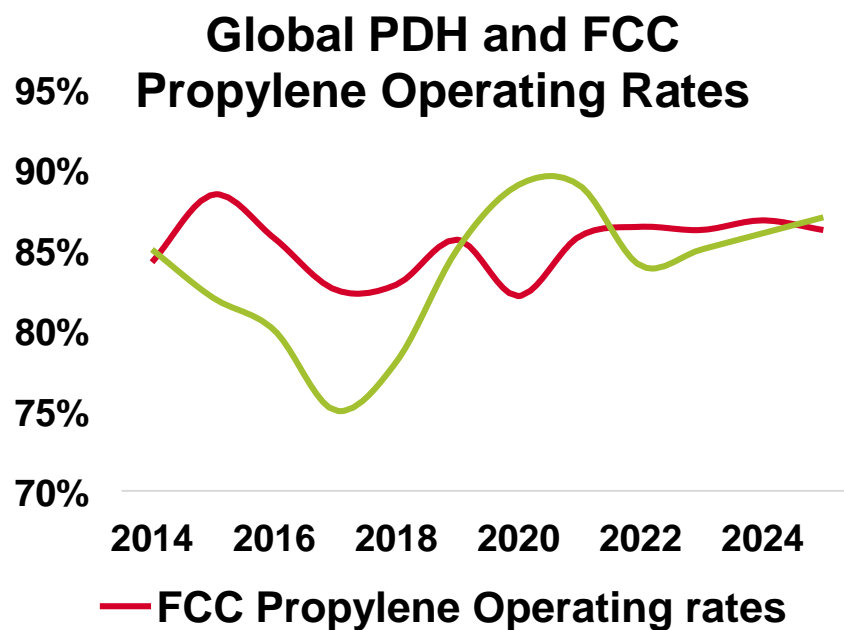
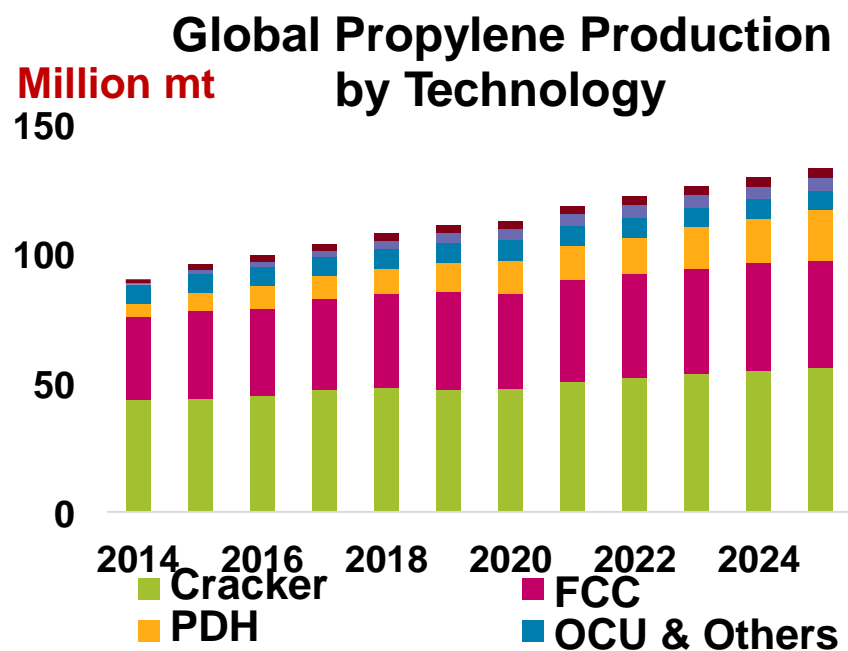
上游烯烃的发展对聚烯烃的影响

最近的乙烯市场就是Goldilocks悖论的一个例子：美国的乙烯利润率为零，对于亚洲的大多数衍生产品来说价格太高，而在欧洲的价格适中。



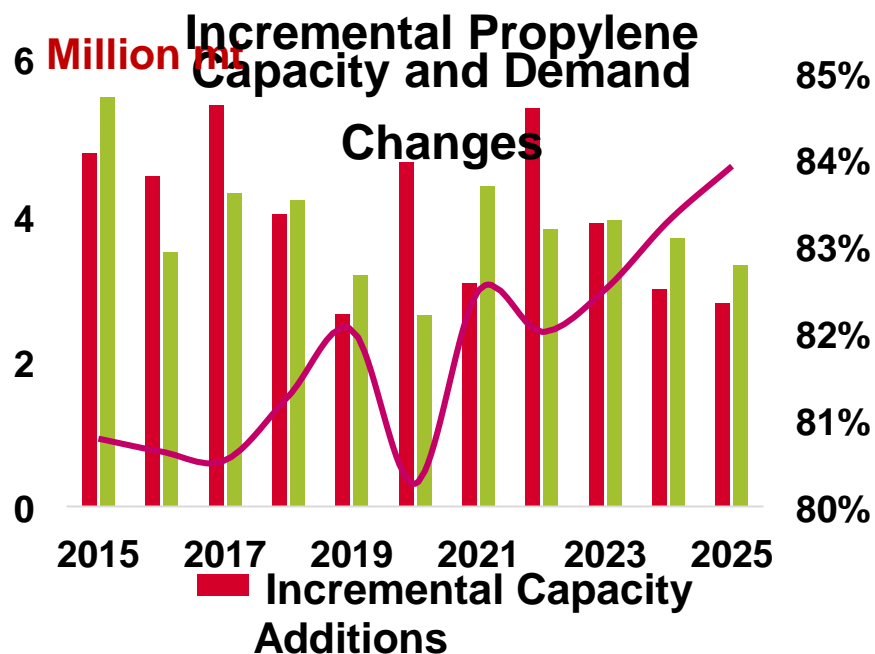
Source: S&P Global Platts Analytics

较轻的裂化的增加导致在PDH，CTO和MTO主导的亚洲和美洲出现了更多的专用丙烯生产。



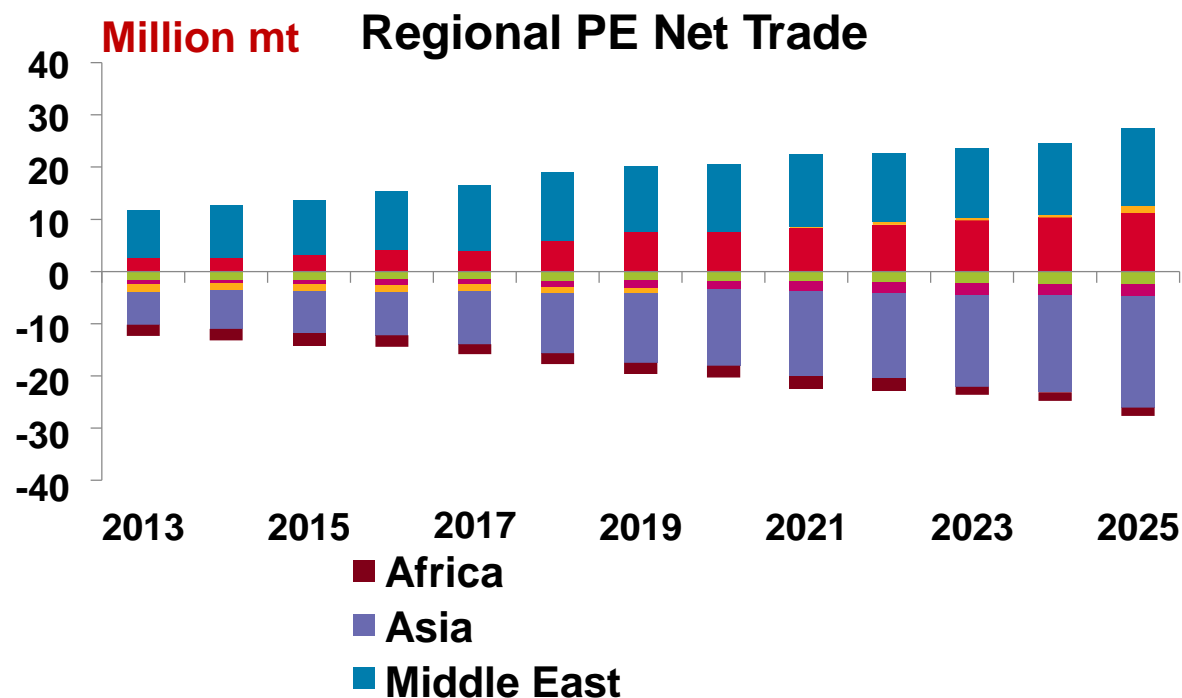
Source: S&P Global Platts Analytics

丙烯市场动态比乙烯更为紧张，但未来几年新的动产能力将导致价格下降，直到2023年之后才开始持续复苏。



Source: S&P Global Platts Analytics

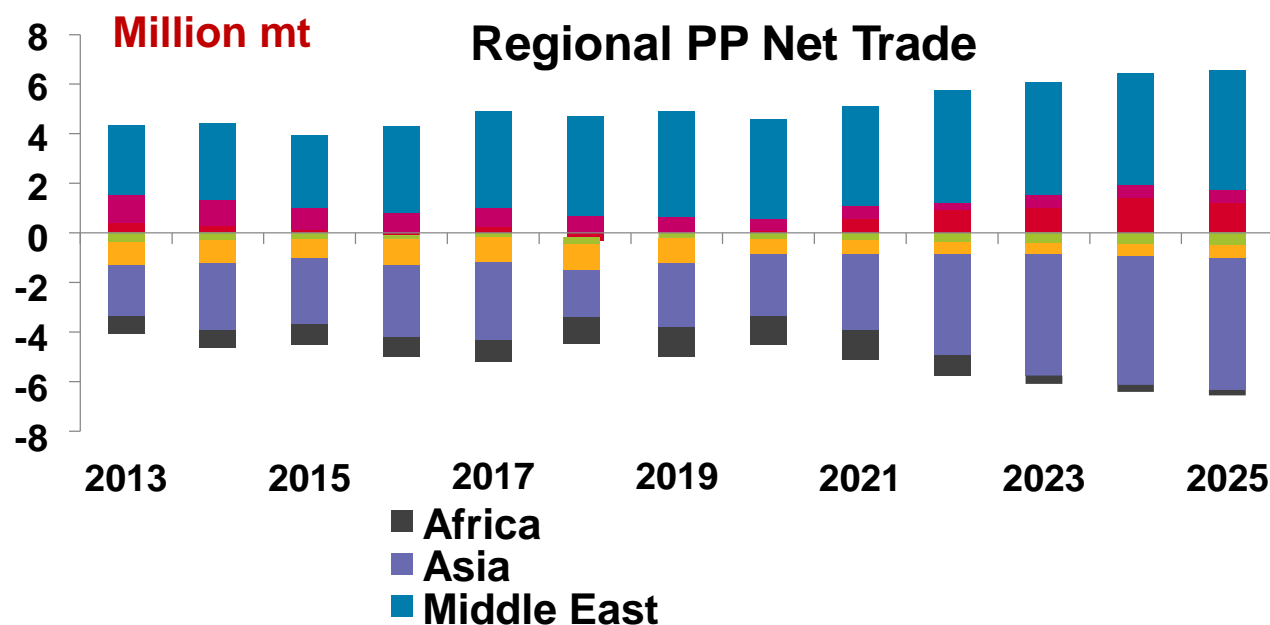
结论：中东和美国将是主要的聚乙烯出口国



- Shale based ethane expansions in the US will result in its emergence as a hub of HDPE and LLDPE exports alongside the Middle East
- Asia, in particular China will continue to grow as the main importing region due to strong demand growth, despite capacity additions
- The Middle East will continue to dominate exports to Asia, Africa and Europe
- However, the US will have to compete with the Middle East for exports into Asia and Europe
- Current uncertainty remains due to China-US trade war and 25% import tariffs for HDPE & LLDPE

Source: S&P Global Platts Analytics

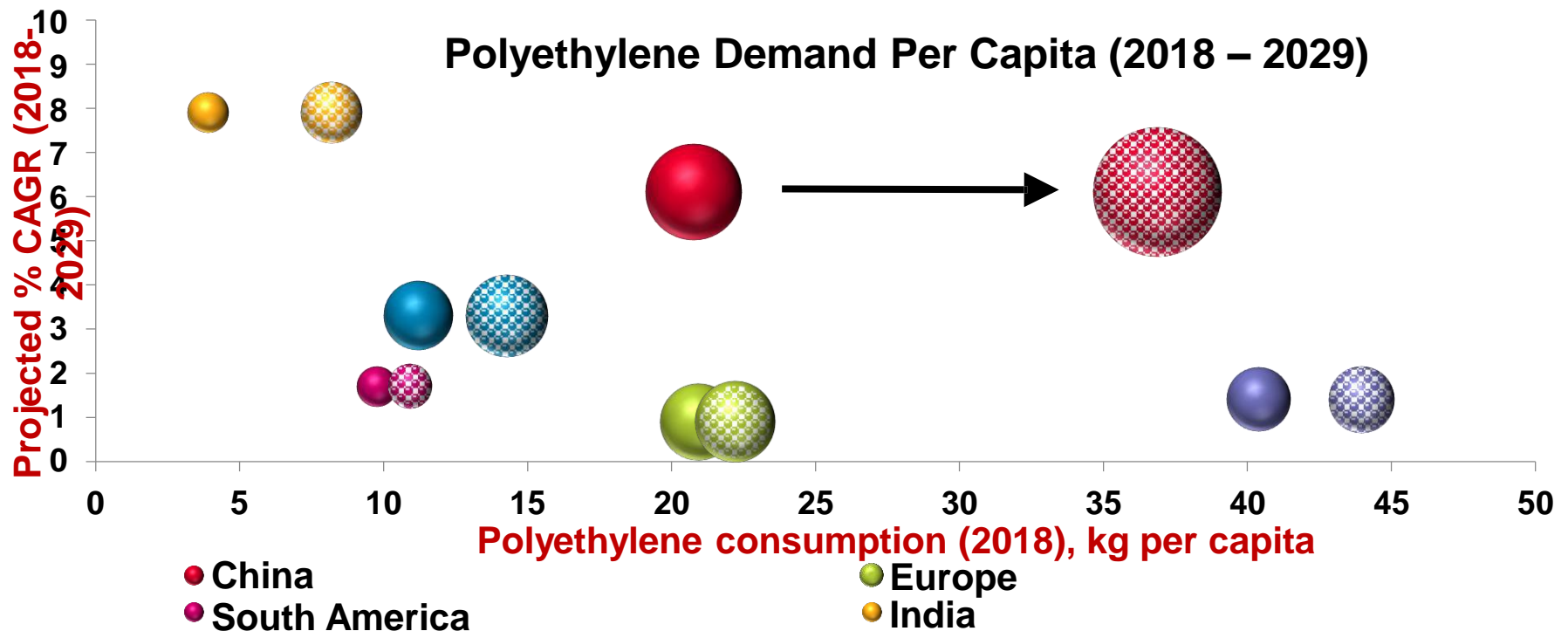
随着一体化PDH / PP项目的建立，亚洲将继续主导PP进口，而北美将通过前景向净出口国过渡。



- Asia to lead the way in terms of import requirements despite Chinese PDH/PP capacity additions
- The Middle East will maintain its position as the key global PP exporter
- Capacity additions in the USGC & Canada will see North America emerge as a growing export region with PP flowing mainly South America & Asia

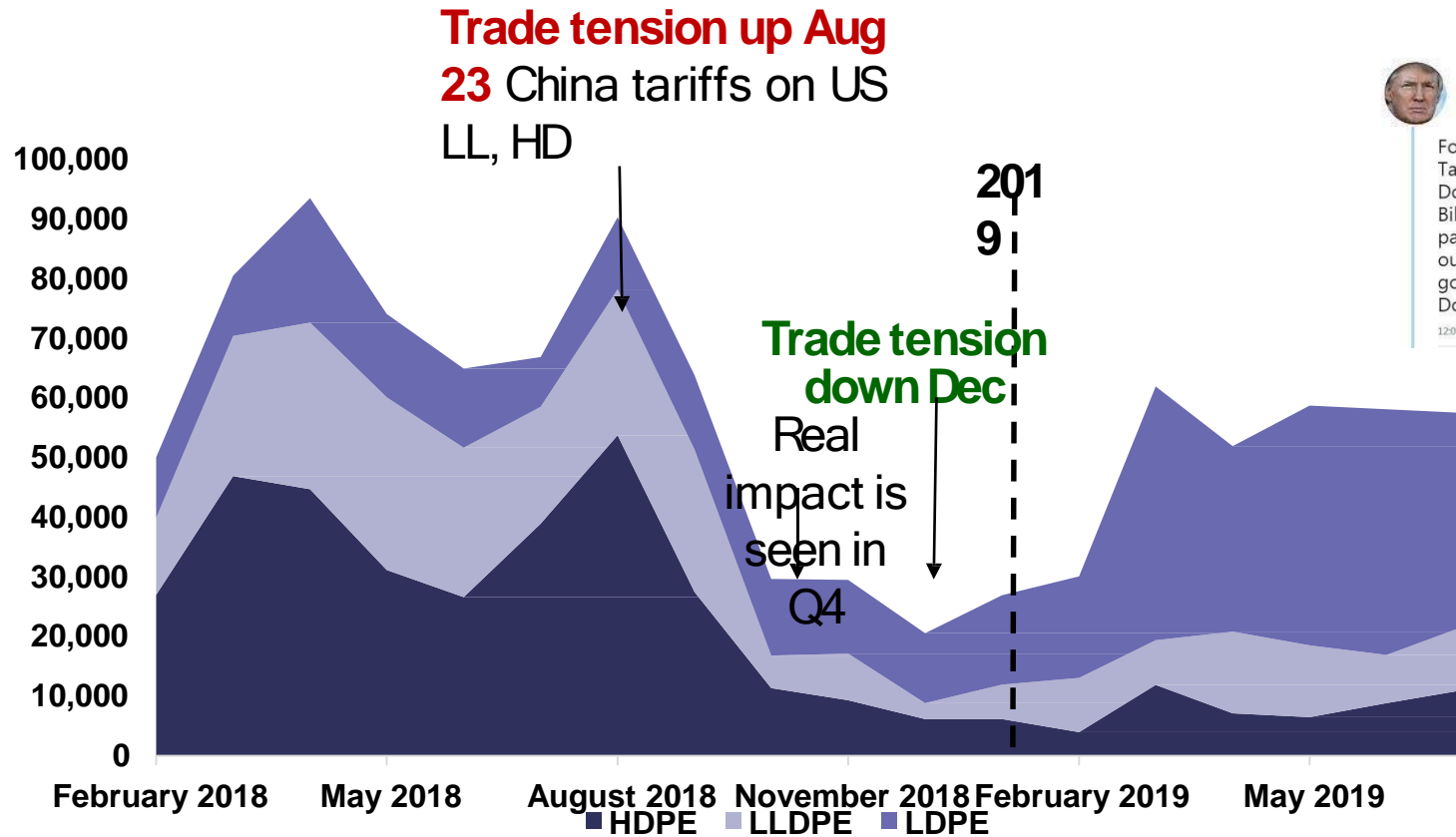
Source: S&P Global Platts Analytics

亚洲经济体的PE需求增长一直快于GDP增长，因为它们努力达到人均“西方”需求水平以及城市化水平的提高。



Source: S&P Global Platts Analytics

贸易紧张局势加剧时，中国从美国的PE进口下降



Donald J. Trump
@realDonaldTrump

Following

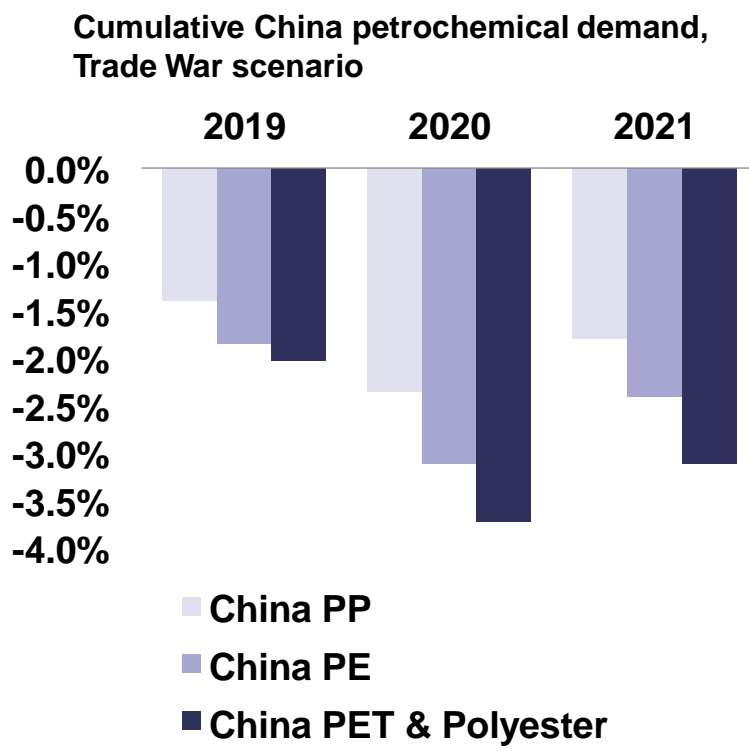
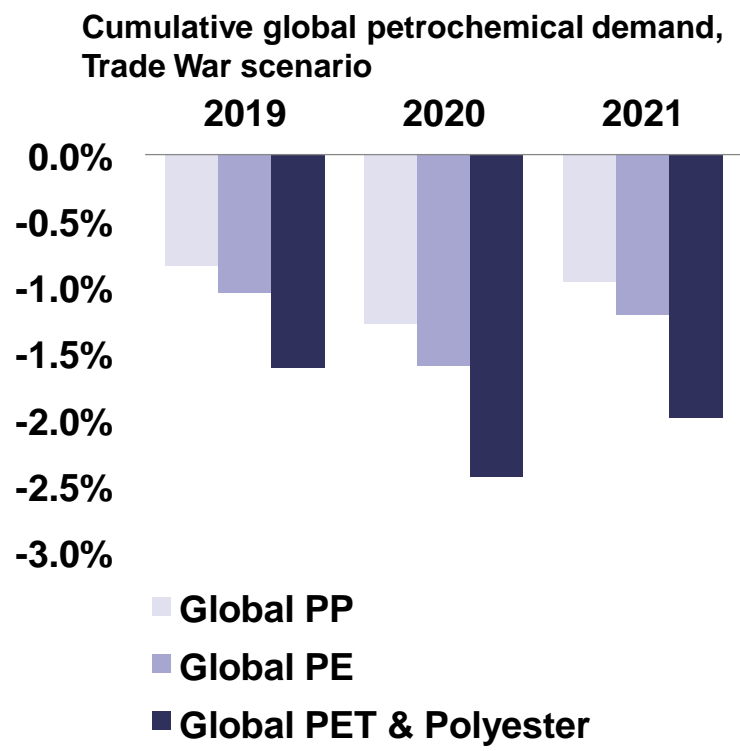
For 10 months, China has been paying Tariffs to the USA of 25% on 50 Billion Dollars of High Tech, and 10% on 200 Billion Dollars of other goods. These payments are partially responsible for our great economic results. The 10% will go up to 25% on Friday. 325 Billions Dollars....

12:08 PM - 5 May 2019

Trade tension up
Will China LD imports from US fall?

Source: S&P Global Platts Analytics

在5,000亿美元的贸易战中，全球聚合物需求增长修正为1.5 %– 2%。



Source: S&P Global Platts Analytics

- IMO 2020预计将提高石脑油价格，这将压低乙烯利润
减少炼厂丙烯供应
- 未来几年，随着更多产能的投产，全球乙烯和PE利润率
将面临压力，而PE的扩张将推动乙烯需求 由于供过于
求的减少
- 全球丙烯和PP利润率也将下降，但幅度不及乙烯和PE
PP扩产推动丙烯需求

- **Thank You!**
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Any