

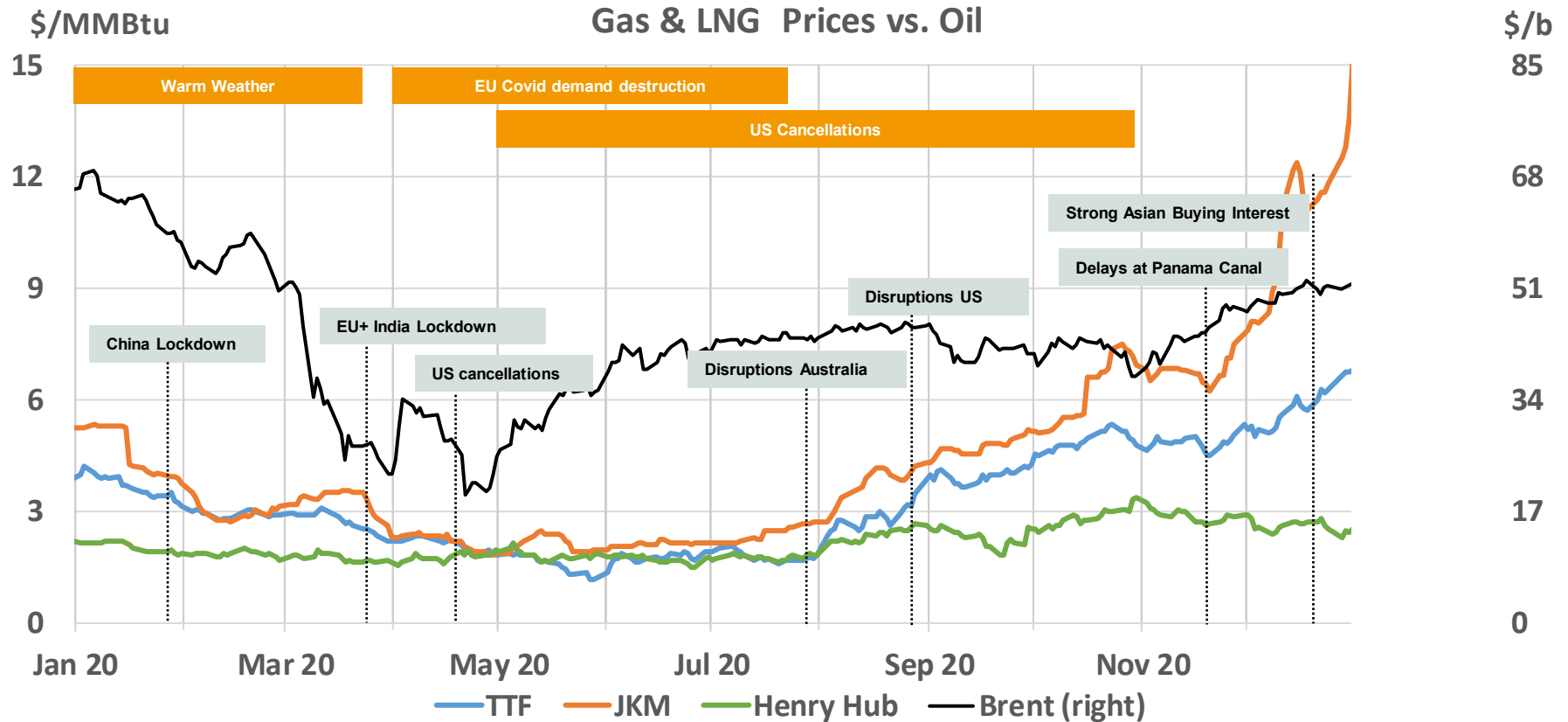


THE LNG MARKET: A NEW REALITY

Patrick Dugas - Vice President LNG Trading, Total Gas & Power Limited, Switzerland

16th February 2021 – 11th World PetroCoal Congress & Expo 2021

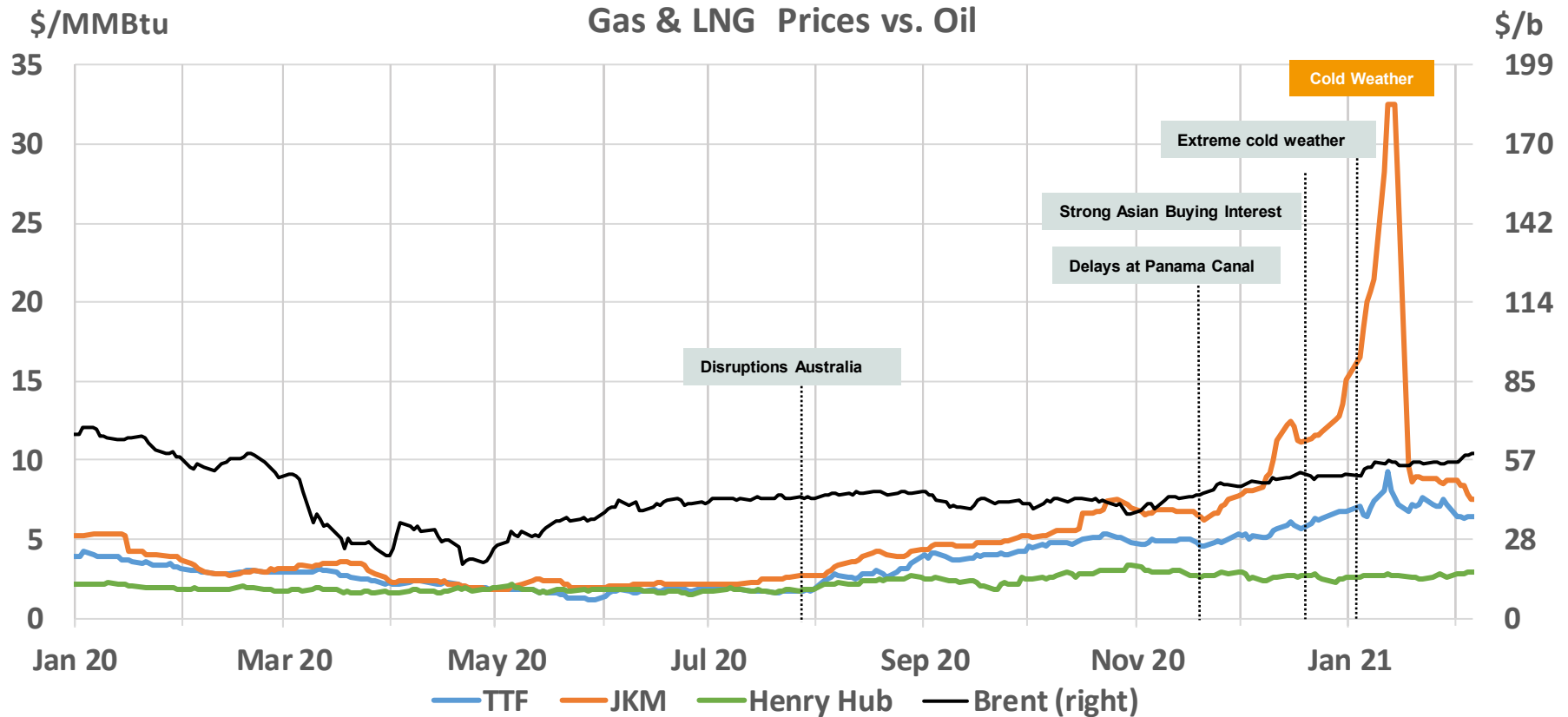
2020 CHARACTERIZED BY “FIRST EVER” TYPE OF EVENTS



Source: Heren, Cme, Platts, ICE, TGP assessments

2020 CHARACTERIZED BY “FIRST EVER” TYPE OF EVENTS

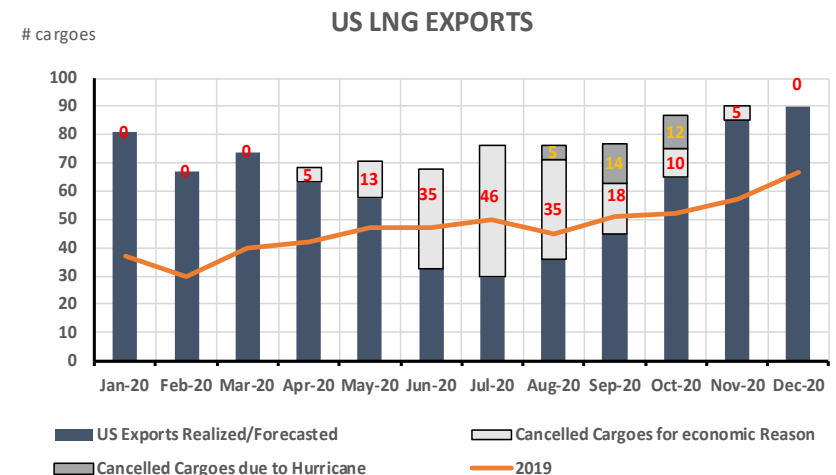
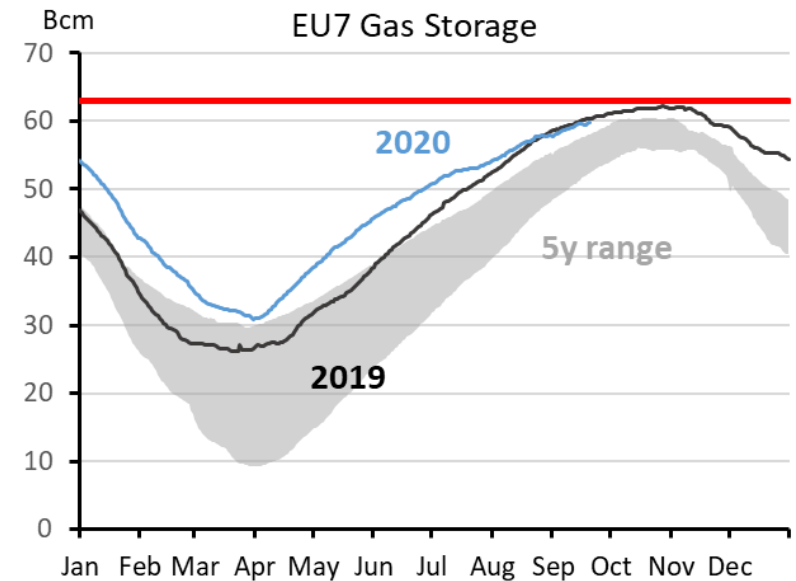
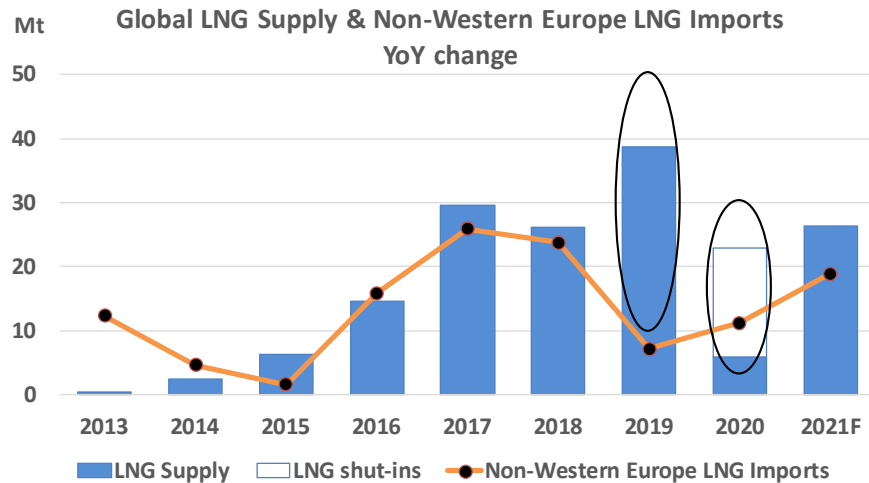
2021 SURPRISED ON THE UPSIDE SO FAR



Source: Heren, Cme, Platts, ICE, TGP assessments

LARGE MISMATCH BETWEEN LNG SUPPLY & DEMAND IN 2019 AND 2020

EURO STORAGE THE GLOBAL GAS WAREHOUSE, US LNG THE LAST RESORT CLEARING MECHANISM



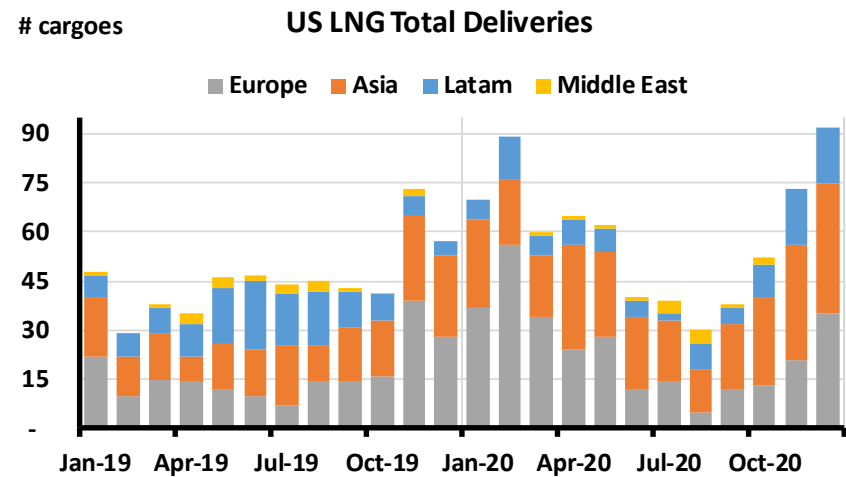
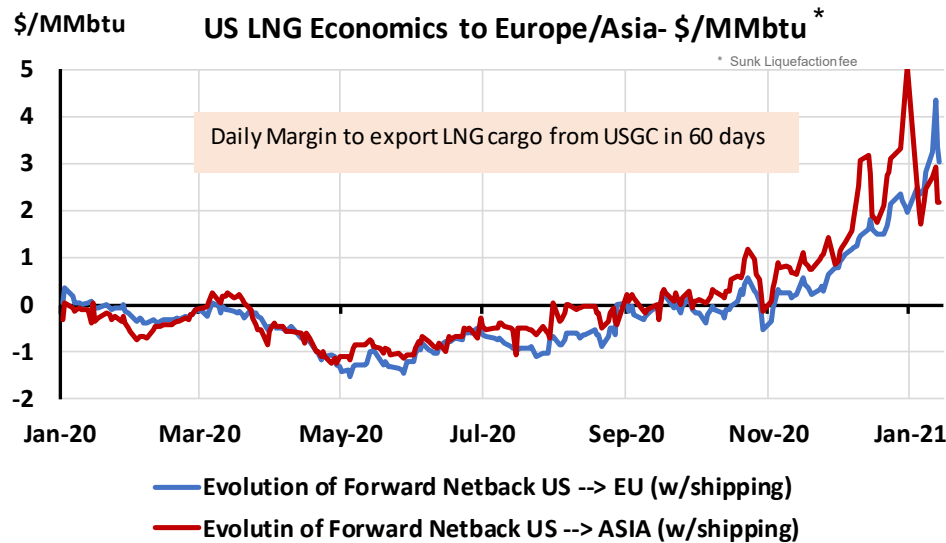
NOTE: EU7 includes UK, Germany, Belgium, Netherlands, France, Spain, Italy

Source: IHS, European TSOs, Kpler, GSE, TGP estimates

Cargo tracking info may differ from one source to another. Preliminary numbers

LNG OVERSUPPLY LARGELY ABSORBED BY THE US (-14MT)

WESTERN EUROPE ACTED AS A SINK FOR VOLUMES ON THE WAY UP... AND DOWN

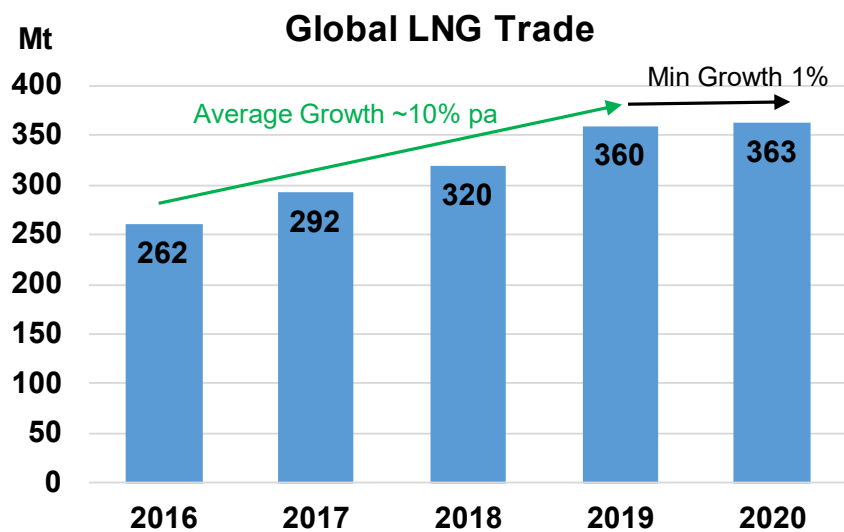


- 167 cargoes (~12Mt) cancelled on economics
- 31 cargoes (~2Mt) lost because of hurricanes

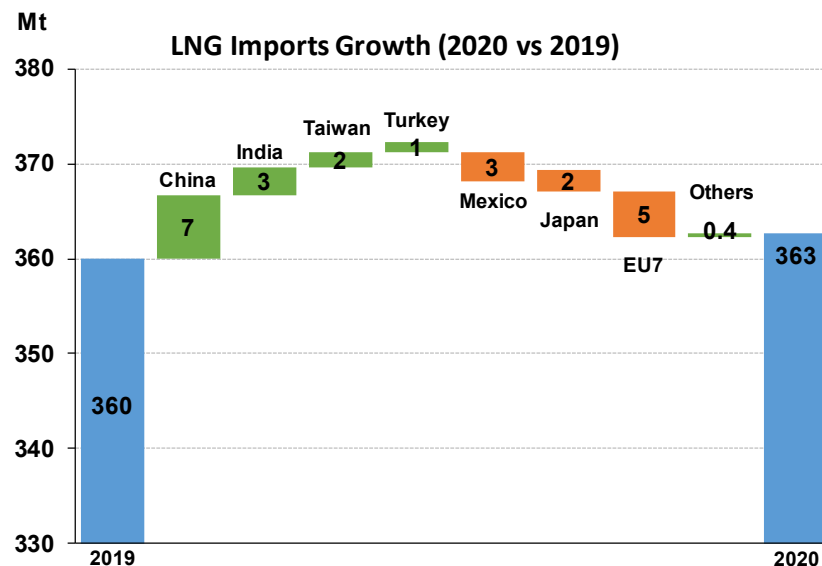
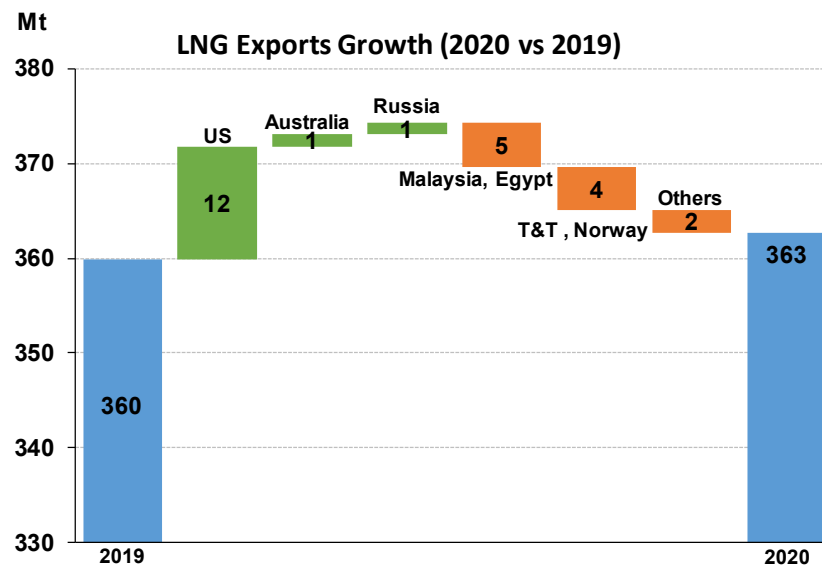
Source: Kpler, EIA, Genscape, TGP estimations
Cargo tracking info may differ from one source to another. Preliminary numbers

2020 GLOBAL LNG TRADE ENDED JUST +1% HIGHER YOY

US LED SUPPLY GROWTH DESPITE CANCELLATIONS; INDIA & CHINA LED DEMAND GROWTH

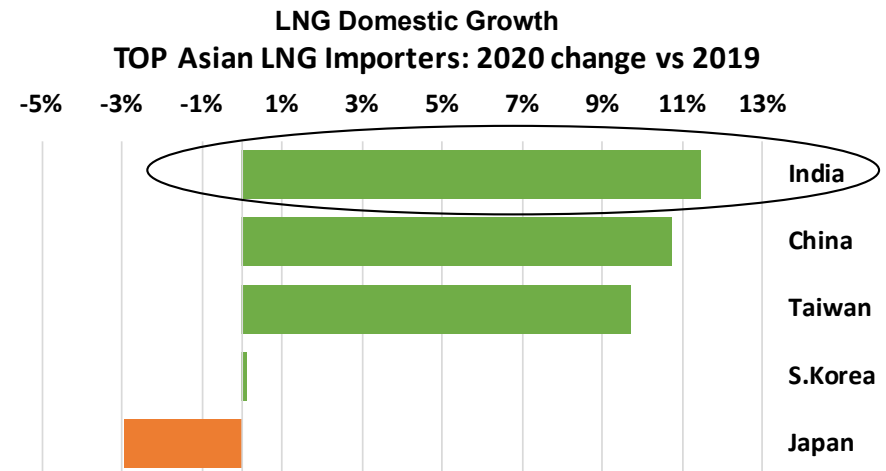
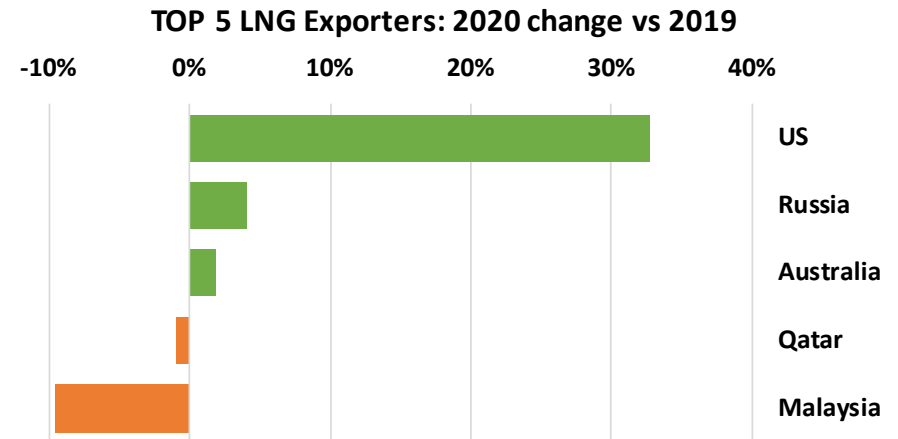
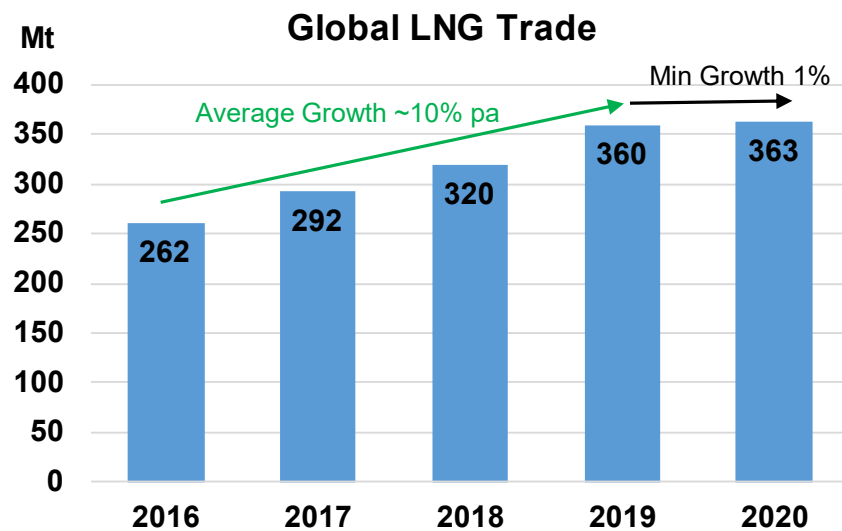


Source: Kpler. Cargo tracking info may differ from one source to another. Preliminary numbers



2020 GLOBAL LNG TRADE ENDED JUST +1% HIGHER YOY

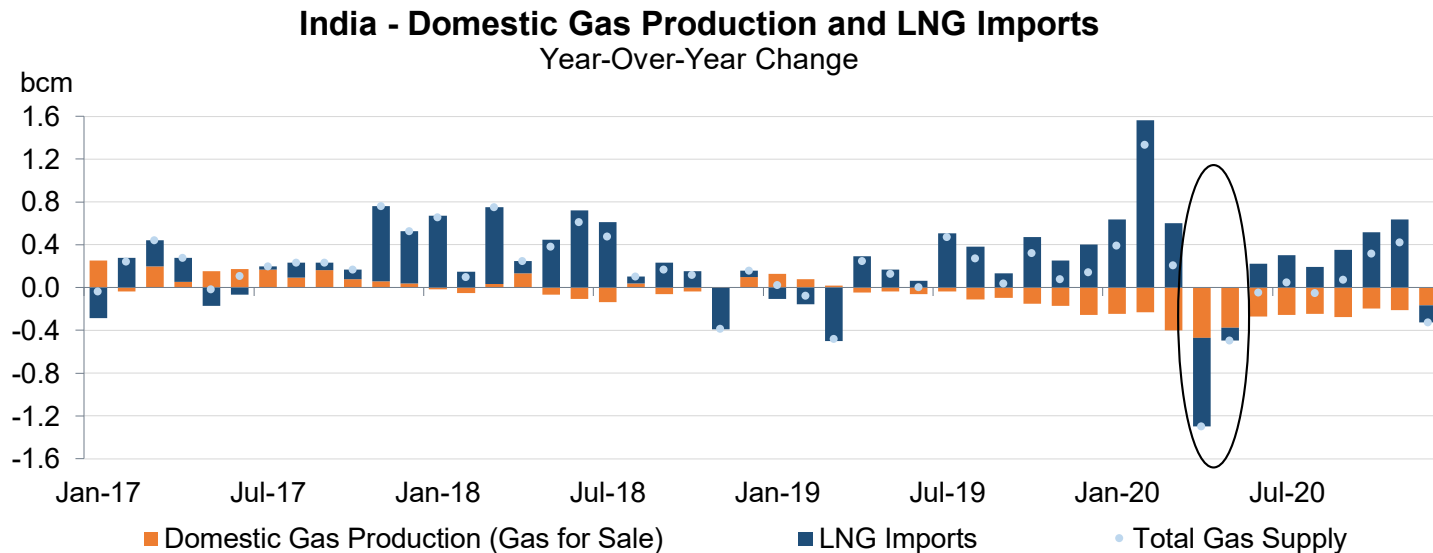
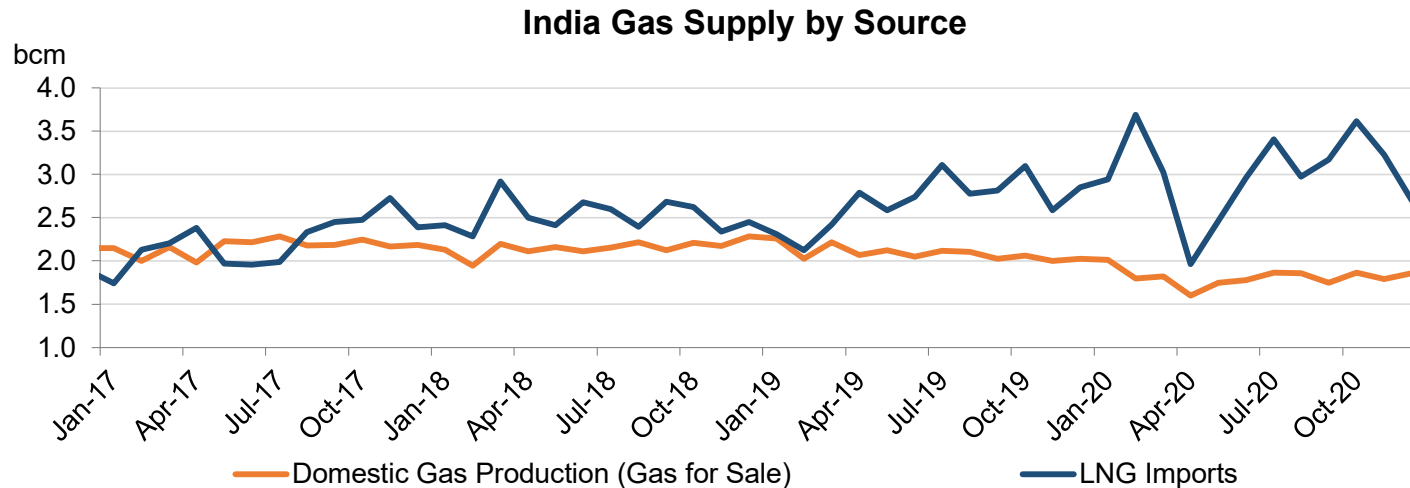
US LED SUPPLY GROWTH DESPITE CANCELLATIONS; INDIA LED DEMAND GROWTH...



Source: Kpler. Cargo tracking info may differ from one source to another. Preliminary numbers

INDIA: LNG IMPORT GROWTH ENABLED BY NEW INFRASTRUCTURES

LNG HELPED OFFSET DOMESTIC GAS PRODUCTION DECREASE THROUGH COVID-19

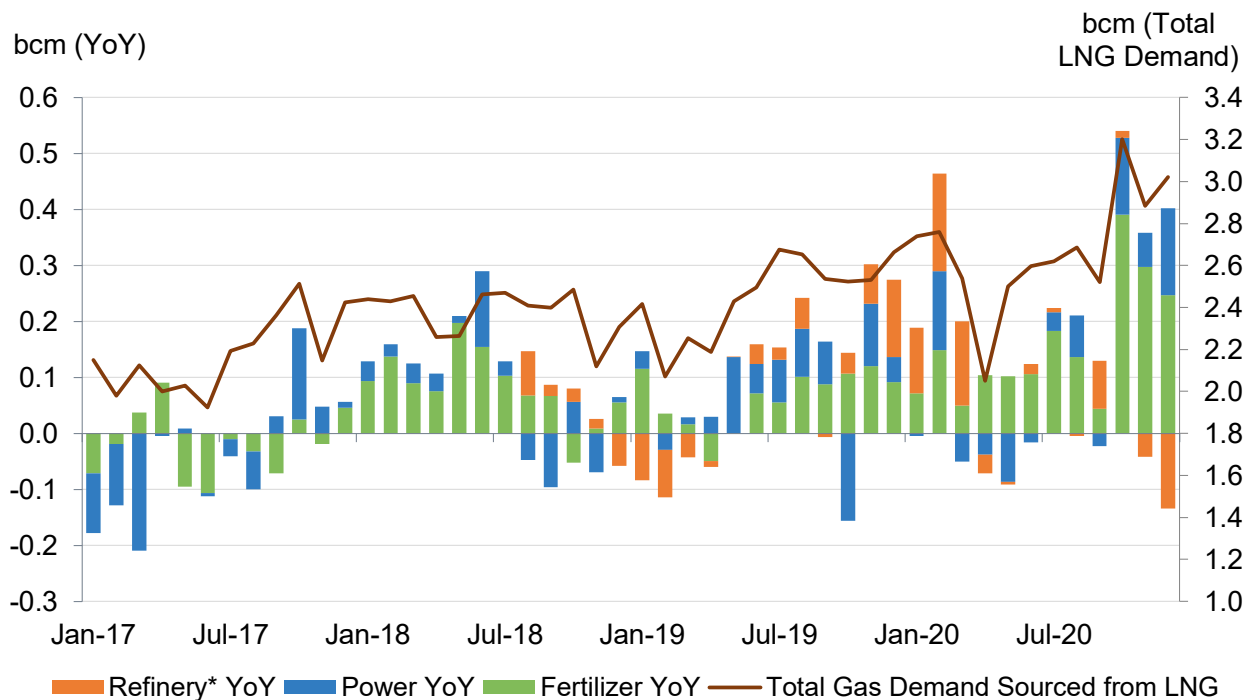


Source: PPAC, Ministry of Petroleum and Natural Gas, Government of India

INDIA: LNG FUELLING INDUSTRIAL GROWTH

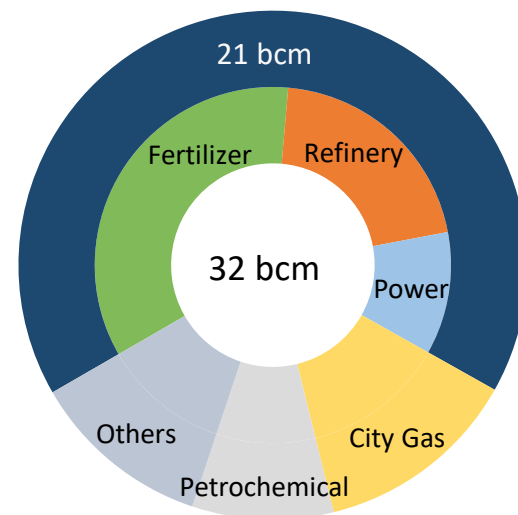
FERTILIZERS: THE LARGEST GROWING SECTOR WITH GAS SOURCED FROM LNG

India - Gas Demand by Sector Sourced from LNG



* YoY data for the refinery sector starts in August 2018. Refinery gas demand data sourced from LNG is available from August 2017

2020 Gas Demand by Sector Sourced from LNG

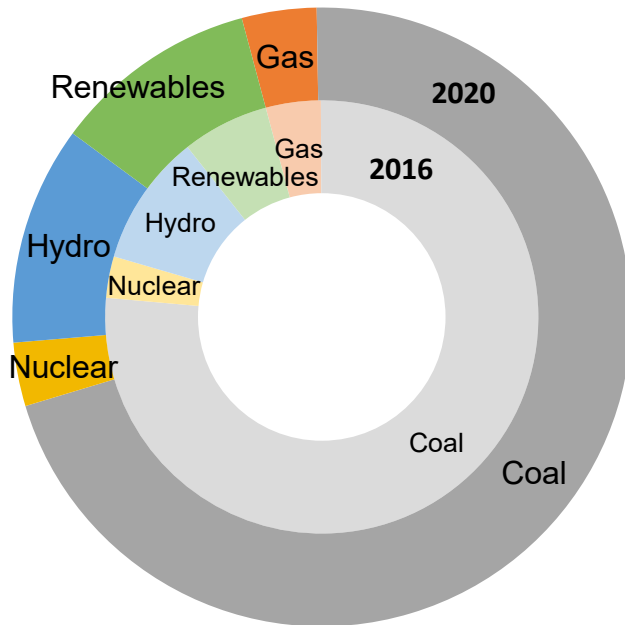


Source: PPAC, Ministry of Petroleum and Natural Gas, Government of India

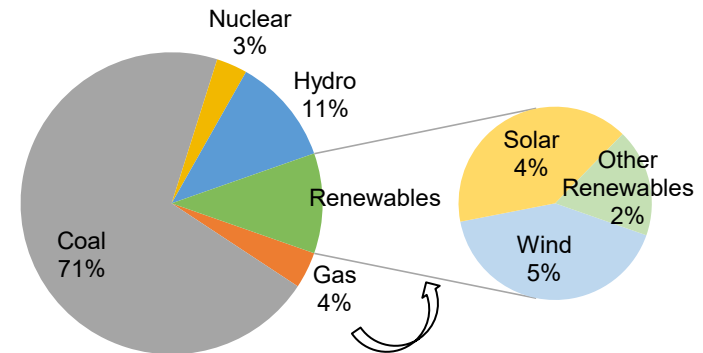
INDIA: LARGE ROOM FOR LNG GROWTH IN THE POWER SECTOR

GAS IS THE BEST ALLY OF RENEWABLES

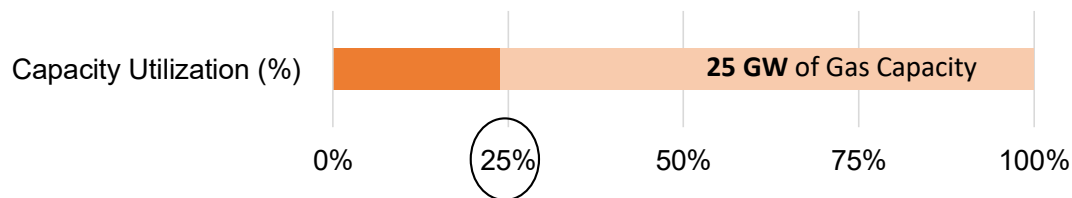
**Power Generation by Fuel
2016 vs 2020**



2020 Power Generation by Fuel



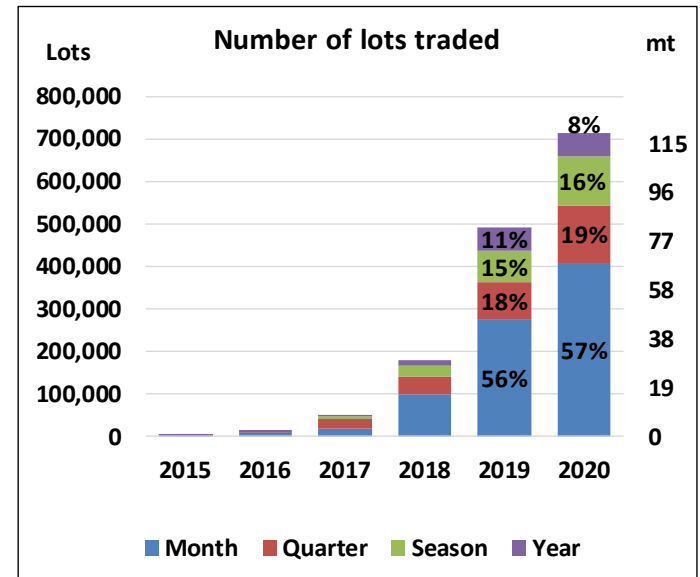
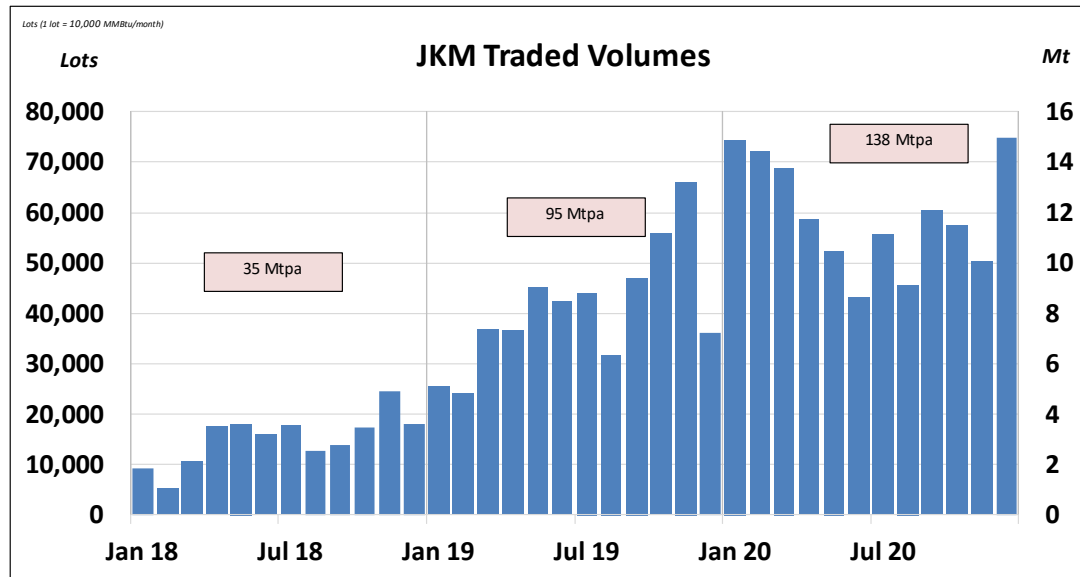
2020 Utilization of Grid-Connected Gas Capacity



Source: Central Electricity Authority (CEA), Ministry of Power, Government of India

JKM RAPID DEVELOPMENT TRIGGERING NEW MARKET OPPORTUNITIES

2020 JKM VOLUMES AT 138 MT (2330+ CARGOES) INCREASED +45% Y-O-Y



NOTE: 1 lot = 10,000MMBtu; 1 cargo = approx. 300 lots
 The above chart is for ICE cleared futures only.
 Volumes traded un-cleared are not known
 Source: ICE, Trayport

LNG MARKET REALITY: TOWARDS COMMODITIZATION

