

Yogyakarta, Indonesia - Secretary General Joseph McMonigle



Key Points:

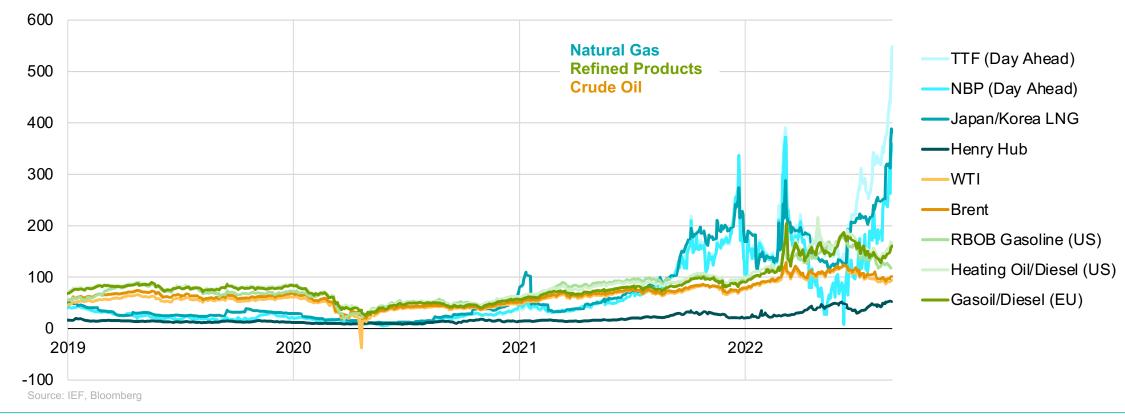
- The worst is likely still ahead for energy markets.
- This winter could see increased rolling blackouts, re-emergence of "heat or eat," and mounting social unrest.
- High energy prices and fuel shortages are not limited to Europe. Developing countries are bearing the brunt of the pain.
- One of the greatest risks for the industry will be the unintended consequences of policy decisions made in a hurry or hard decisions made too late.
- Energy security is not only a near-term concern, and it cannot be bought at the expense of others. It requires investment in long-term partnerships and in reliable and diversified energy supplies.
- Successful policies are not "one and done." The balance between affordability, security, and sustainability must be continuously assessed and addressed over time.



Today's Energy Price Volatility Dwarfs Any Other Period in History

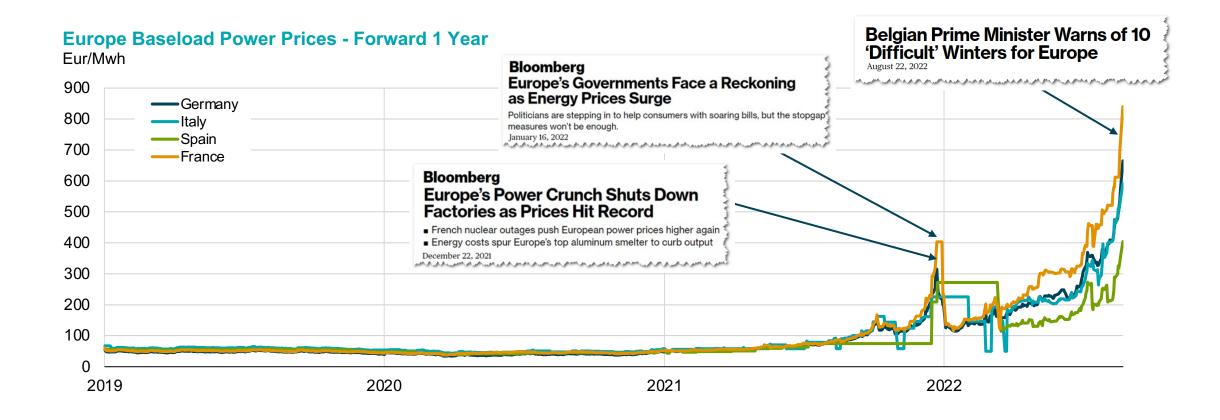
Global Energy Futures Prices

USD per barrel of oil equivalent





European Electricity Prices Imply Shock Will Last Well Into Next Year (And Likely Longer)

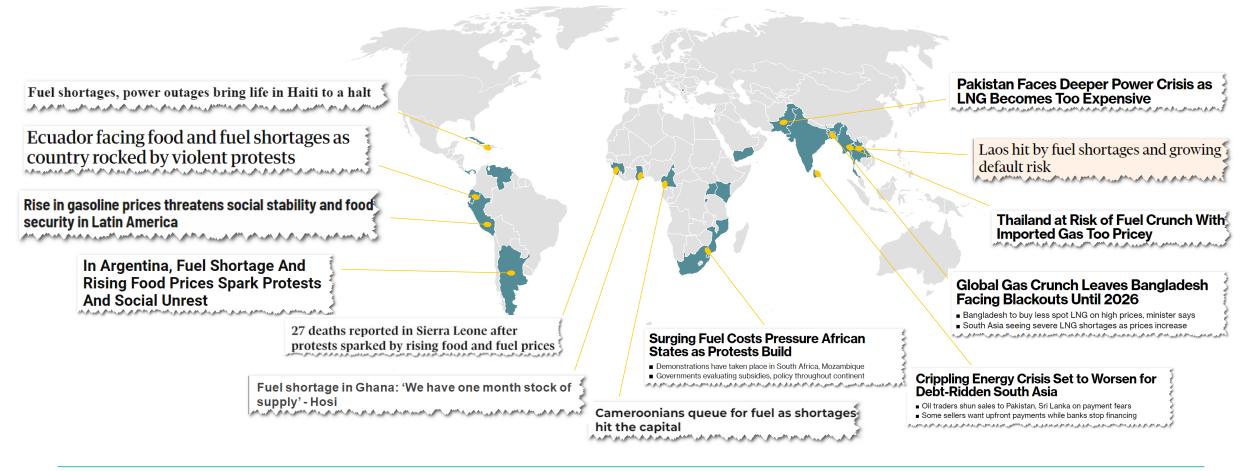


Source: IEF, Bloomberg



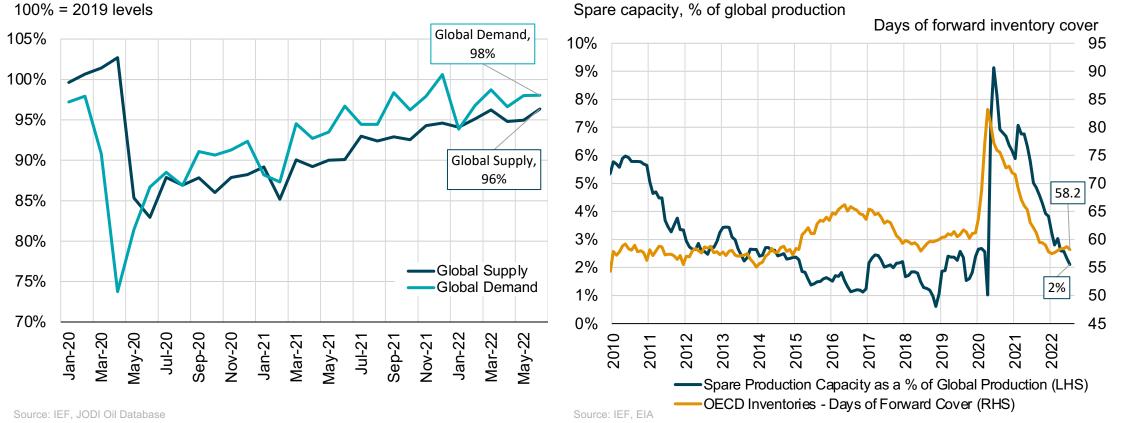
The Energy Crisis is Spreading Beyond Europe and Developing Countries Bear Brunt of the Pain

Fuel Shortages and Protests Spread Across South Asia, Africa, and South America





False Calm: Oil Prices are Lower Despite Tight Fundamentals



Global spare production capacity and OECD inventories

Global Demand and Crude Production 100% = 2019 levels



Economic Downturn May Dampen Oil Demand, But History Shows Impact Could Be Limited & Temporary

% Global Growth Y/Y Demand Growth mb/d Y/Y GDP Growth 5.0% 8% 8 6 6% 4.5% 4% 2 2% 2 4.0% 0% 0 -2 3.5% -2% -4% -4 3.0% -6 -6% -8 -8% 2.5% -10 -10% Aug-22 Jan-22 Apr-22 May-22 Jun-22 Jul-22 Aug-21 Oct-21 Feb-22 Sep-21 Nov-21 Dec-21 Mar-22 2020 2022 982 984 986 988 066 992 966 998 2000 2002 2004 2006 2008 2012 980 994 2010 014 ဖ ω 201 2018 IMF OECD World Bank IEA OPEC Barclays Global GDP Growth (right) Global Demand Growth (left) **Global Recession** UBS Scotiabank Oxford Economics Average Source: IEF, IMF, World Bank, IEA, OPEC, Barclavs, UBS, Scotiabank, Oxford Economics, Bloomberg Source: IEF. BP Statistics. IMF

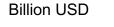
Global GDP and Oil Demand Growth

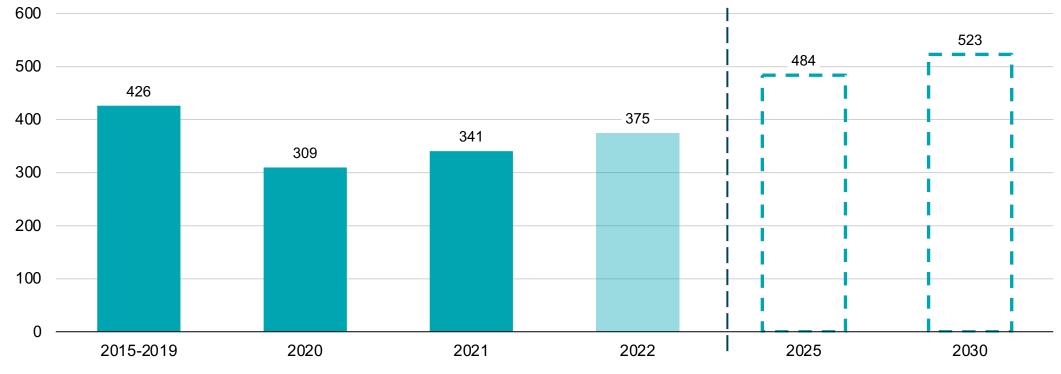


Global GDP Forecasts for 2022

Upstream Oil & Gas Investment Needs to Increase to ~\$525 bn to Provide Adequate Supplies <u>This Decade</u>

Global Upstream Oil & Gas Investment





Source: IEF, S&P Global



Energy Security Strategies

- Stimulate sustainable growth and investment with clear and stable policies.
- Diversify access to markets and resources, including critical minerals.
- Expand global energy markets data on energy flows, storage spare capacity, and critical minerals. (e.g. JODI)
- Give energy markets room to adjust, respect contracts, and minimize interventions that add risk and uncertainty in a highly volatile environment.







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