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Commodities Research

COMMODITY VIEWS

2026 Outlook: Ride the Power Race and Supply Waves

The US-China AI and geopolitical power race and global energy supply waves drive our key convictions.

Commodity indices have delivered strong total returns in 2025 (e.g. BCOM 15%) because very strong returns in industrial and especially precious metals, which both tend to benefit from Fed cuts, have outweighed modestly negative returns in energy. Our cyclical macro base case of sturdy global GDP growth and 50bp of Fed rate cuts in 2026 is again supportive of top-down commodity returns. However, we believe that two major structural trends will drive the outlook for commodities, with a base case where commodity index returns moderate (Exhibit 15), but with again significant return differentiation across commodities and relative value opportunities:

First, on the macro side, commodities will likely remain at the center of the US-China race for geopolitical power and for tech and AI dominance.

Second, on the micro side, two large energy supply waves that started in 2025 drive our energy calls. While 2026 is the last year of the oil supply wave¹, the LNG supply wave is much longer with a predicted surge in LNG exports of over 50% in 2025-2030.

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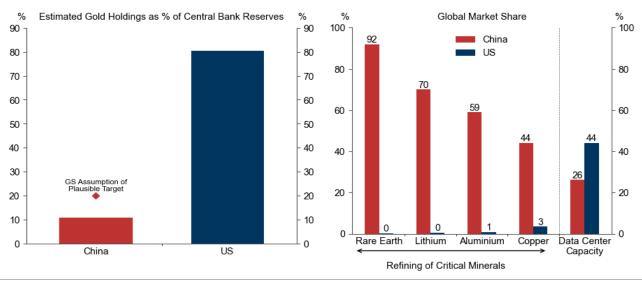
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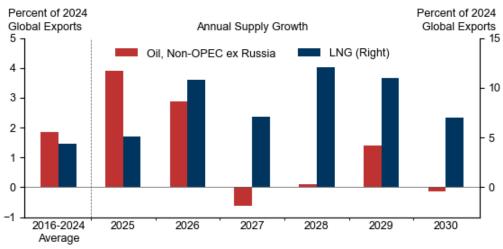
2026 Outlook: Ride the Power Race and Supply Waves

Exhibit 1: Upside to China/EM Central Bank Gold Reserves From Diversification; China Leads Refining of Critical Minerals While the US Has More Data Center Capacity



Source: IMF, IEA, Wood Mackenzie, Goldman Sachs Global Investment Research

Exhibit 2: A Short-Lived 2025-2026 Oil Supply Wave But a Long-Lasting and Large LNG Supply Wave



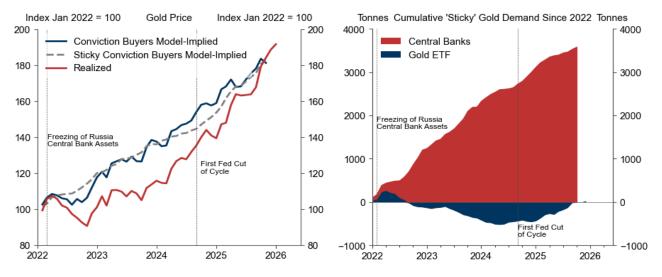
Oil supply is defined as non-OPEC crude ex Russia liquids supply. Data is from the IEA for 2015-2016 and GS from 2017 onwards. Global oil exports are defined as seaborne exports of crude, condensate, and NGL (naphtha + LPG + ethane).

Source: IEA, Kpler, Goldman Sachs Global Investment Research

¹ The 2025-2026 oil supply wave mostly results from long-cycle projects that saw Final Investment Decisions

The Geopolitical Power and AI Race Between the US and China

Exhibit 4: The Gold Rally Accelerated in 2025 as Both Sticky High Conviction Buyers—ETF Investors and Especially Central Banks—Started Competing for Limited Bullion



Our pricing framework features conviction buyers—ETFs, central banks, speculators—who buy irrespective of price on a macro-or risk hedging view, while opportunistic buyers—households in emerging markets—step in when the price is right (see "Precious Analyst: Gold Market Primer"). The conviction buyers model-implied estimate accounts for gold demand from central banks, ETFs, and speculators. The sticky conviction buyers model-implied estimate only accounts for gold demand from central banks and ETFs, whose holdings are stickier/less volatile than for speculators.

Source: Bloomberg, Goldman Sachs Global Investment Research

We expect central bank gold buying to remain strong in 2026, averaging 70 tonnes per month (close to its 66 tonnes 12-month average, but 4 times above the 17 tonnes pre-2022 monthly average), and contribute about 14pp to our predicted price increase by Dec26 for three reasons. First, the freezing of Russia's reserves in 2022 was a sea change in how EM reserve managers perceive geopolitical risks. Second, the estimated gold reserve share of EM central banks such as the PBoC remains relatively low vs. global peers (Exhibit 1, left panel), especially given China's ambition to internationalize the RMB. Third, surveys show record high central bank gold appetite.

We see upside risk to our gold price forecast from a potential broadening of diversification to private investors. Gold ETFs account for just 0.17% of US private financial portfolios, 6 basis points below its 2012 peak. We estimate that every 1bp increase in the gold share of US financial portfolios—driven by incremental investor purchases rather than price appreciation—raises the gold price by 1.4% (Exhibit 5).

% US Privately Held Financial Assets (2025Q2) % 0.30 1.75 0.25 1.50 0.20 1.25 1.00 0.15 0.75 0.10 0.50 0.05 0.25 0.00 0.00 Gold Price Impact of Gold Share 1bp Increase in Gold Share (Right)

Exhibit 5: We Estimate That Each 1bp Increase in Gold's Share of US Financial Portfolios— Driven by Incremental Investor Buying—Lifts the Gold Price by About 1.4%

We calculate the gold ETF share in privately held financial portfolios as: gold ETF share = US gold ETF market cap \div US financial portfolios, where financial portfolios are defined as privately held debt securities and corporate equities based on US Flow of Funds data. We include all sectors excluding federal government, state & local government, monetary authority, US depository institutions, foreign banking offices, and rest of world.

Source: Federal Reserve Board, Goldman Sachs Global Investment Research

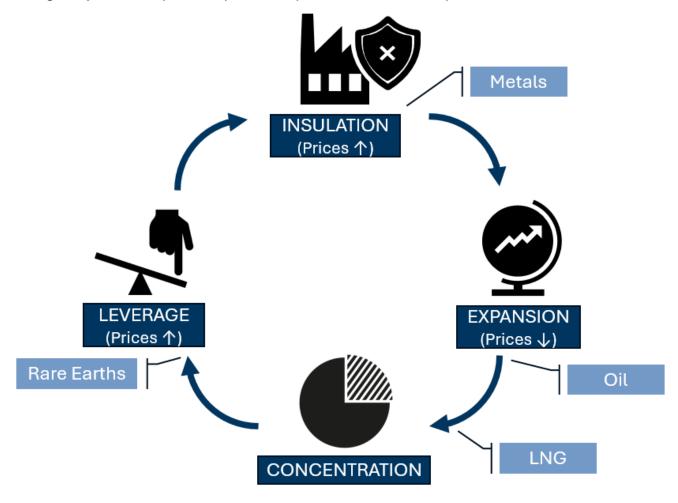
Insurance Value of Commodities

Even as gold remains our single favorite long commodity, we see a strong role for broader commodity length in strategic portfolio allocations. The very high geographic concentration of commodity supply and the increasing geopolitical, trade, and Al competition has led to a more frequent use of commodity dominance as leverage. This raises the risk of supply disruptions, which underscores the insurance value of commodities. Equity-bond portfolios are not well-diversified when commodity supply losses drive both weaker growth and higher inflation as well as strong commodity returns.

China's restrictions of exports of rare earths, which are vital for the production of semiconductor chips, AI, batteries and defense equipment,² fit in our commodity control cycle framework (Exhibit 6). In this cycle, as globalization stalls and countries turn increasingly inward, they typically 1) insulate/reshore commodity supply chains through tariffs, subsidies, and investment (copper and aluminum are in this phase), 2) expand production (oil and LNG are in this phase), 3) raise supply concentration by forcing high-cost producers elsewhere to exit, and 4) use dominant supply as leverage (as happened to rare earths).

² China's exports restrictions remain in place for the geologically scarce so-called heavy rare earths.

Exhibit 6: As Countries Turn Increasingly Inward, Commodities May Take On a More Strategic Role And Move In a Recurring 4-Step "Commodity Control Cycle", Already Visible Across Commodity Markets



Source: Goldman Sachs Global Investment Research

Beyond rare earths, we see supply disruptions risks in coming years for other critical minerals, natural gas, and oil.

China has built up dominant market shares in refining of many minerals (Exhibit 1), including lithium (critical for storing energy and modernizing the grid), copper (critical for distributing power locally), and aluminum (critical for transmitting power over long distances).

We expect the LNG supply wave to reshuffle but not reduce Europe's natural gas import dependence. In 2022 Russia—then supplying 40% of Europe's gas—curtailed flows to Europe. While our base case is that a surge in US and Qatari cargoes will end Europe's energy crisis, the potential rise in US/Qatari exports to 70/10% of European imports by 2030 recreates the potential for using gas as geopolitical leverage.³

While our 2026 base case is excess oil supply, disruptions from Russia, Venezuela, and Iran are risks to watch, especially with a moderation in OPEC+ spare capacity.

³ Qatar warned it could halt LNG deliveries to Europe if no further changes are made to the EU corporate sustainability rules. The US Administration appears to also want the EU to exempt American oil and gas companies from a law aimed at curbing emissions of methane.

% Top Producers Share % 100 100 China Russia US Australia 80 80 OPEC Qatar India DR Congo 60 60 40 40 20 20

Coal

0

LNG

Exhibit 7: Commodity Supply Is Increasingly Concentrated

Source: IEA, EIA, National Mining Association, Goldman Sachs Global Investment Research

Crude Oil

0

Cobalt

Copper Price Consolidates in 2026 as Tariff's Boost Appears Priced in

The copper price has rallied from \$10,600 in November to \$11,700 on the expectation that copper inflows into the US ahead of a potential tariff on refined copper further reduce ex-US inventories. As Exhibit 8 shows, ex-US inventories have better explained LME copper prices—which are set in London—in 2025 than global inventories, which are critical for prices in normal years and have risen year-to-date.

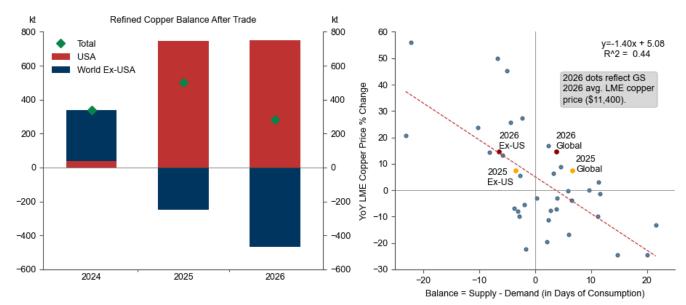


Exhibit 8: 2026 Ex-US Deficit Supports The \$11,400 2026 Copper Price Forecast

RHS: Regression based on annual data (1990–2024); LME copper price year-on-year change versus refined balance in days of consumption. The year 2006 is excluded from the sample. The estimated slope of -1.40 indicates that each 1-day rise in the balance (equivalent to roughly 75 kt of global refined copper) is associated with a 1.40% decline in the copper price. This corresponds to an implied price effect of about +1.85% for each -100 kt change in the refined balance. Forecast points (2025–2026 global and ex-US) are shown for illustration but are not included in the estimation. The price action in 2025 is in line with the model using the ex-US balance, as US inventory is effectively "trapped".

Source: CRU, Wood Mackenzie, Bloomberg, S&P Global Market Intelligence, ICSG, Goldman Sachs Global Investment Research

We forecast the copper price to consolidate in 2026 and average \$11,400/t under our base case that tariff uncertainty lingers till a mid-2026 announcement that tariffs will be implemented in 2027.

Why do we forecast both a consolidation in copper prices in 2026H1 (and modestly lower prices in 2026H2) and declines in ex-US inventories? First, we estimate that 2026 forwards have essentially priced in our base case that ex-US inventories will decline another ~450kt in 2026, broadly consistent with a sharp rise in speculative positioning. Second, we expect prices to edge down in 2026H2 and early 2027 once the US starts to run down the 1.5Mt of copper we expect it to have stockpiled in 2025-2026.

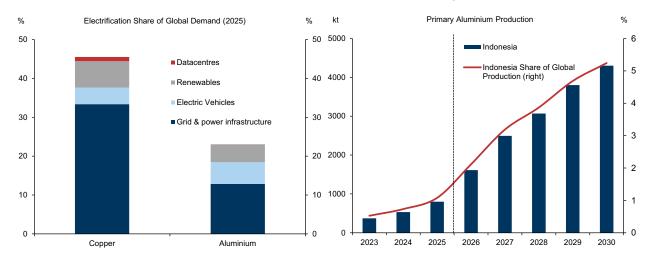
Long-Run Copper Preference Over Aluminium, Lithium, and Iron Ore

Despite the recent rally in copper prices and our expected consolidation in 2026, it remains our 'favorite' industrial metal, especially in the long-run, as electrification—which drives nearly half of copper demand (Exhibit 9, left panel)—implies structurally strong demand growth and as copper mine supply faces unique constraints. Because copper is so critical for strategic sectors such as AI, the power grid, and defense, we believe that price-sensitive China (and potentially US) strategic stockpiling would keep a floor under copper prices if global growth weakened.

Meanwhile, strong supply growth– largely as a result of Chinese overseas investments to guarantee security of metals critical in the AI and geopolitical race– drives our bearish price forecasts for aluminum, lithium and iron ore. We forecast that prices will decline by 19%/25%/15% from spot by end-2026 to \$2,350/\$9,100/\$88, respectively. Specifically, Chinese investments are likely to boost supply in 2026 and beyond of aluminum in Indonesia (Exhibit 9, right panel), lithium primarily in Africa, and iron ore in Guinea. Geographic reserve concentration and long mine development lead times make

it harder for China to implement a similar strategy to grow copper supply.

Exhibit 9: Copper Remains Our Favorite Long-Run Industrial Metal on Strong Electrification Demand and on Copper Mine Supply Constraints in Contrast to Aluminum Where Indonesia Supply Is Likely to Surge



Source: CRU, Wood Mackenzie, SMM, Company Filings, Goldman Sachs Global Investment Research

US Power Market Tightening

The AI-driven US data center boom is set to further tighten US power markets, in sharp contrast with China's ongoing growth in ample power spare capacity.

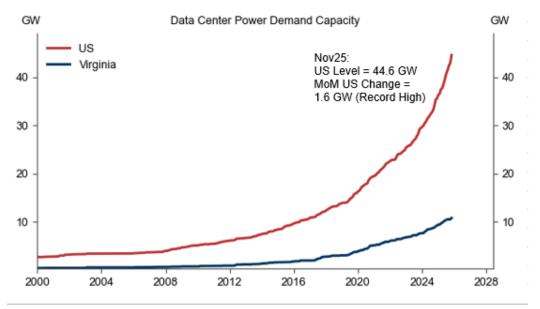
The surge in US data centers—capacity additions reached an all time high in November (Exhibit 10)— has lifted annualized US power demand growth to nearly 3%, outpacing GDP growth. A majority of US regional power markets are already at or below critical spare capacity levels based on our estimates of peak summer effective spare power generation capacity—our summary measure of power availability and reliability. This tightness has already triggered spikes in real-time power prices last summer and power generation capacity prices in the PJM market, which includes Virginia, the world's data center capital.

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⁴ We define effective power generation capacity across energy sources as the power generation capacity that can effectively supply power during the peak summer demand season, considering intermittency and dispatchability across power generation fuels and technologies. We define effective spare power generation capacity—a summary statistic for power market tightness—as the difference between its effective power generation capacity and its peak demand as a share of its peak demand.

Exhibit 10: US Data Center Capacity Additions Are Making New Highs and Are Highly Geographically Concentrated in States Such As Virginia, Implying Spike Risk for Local Power Prices

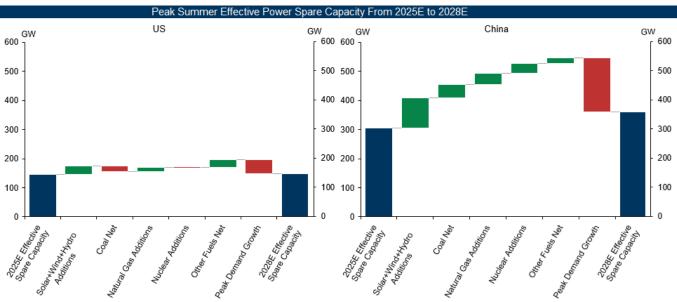


Source: Aterio, Goldman Sachs Global Investment Research

We expect US power spare capacity to decline further as rapid power demand growth and coal retirements outweigh renewable and natural gas power builds. As a result, US power markets are at risk of significantly higher prices and even outages. This risk is particularly acute in local power markets where data centers are booming, with 72% of all US datacenters sitting in 1% of US counties.

China, in contrast, already has ample spare capacity, which we expect to grow further. By 2028, we project that China's effective power spare capacity will be equivalent to over three times the world's expected data center power demand (~360 GW vs. ~105 GW). Therefore, power bottlenecks may slow US progress in the tech/AI race with China.

Exhibit 11: We Expect Power Spare Capacity to Decrease Further in the US but to Rise in China, With China Power Supply Growing Across Renewable, Coal, Natural Gas, and Nuclear Sources



Coal net refers to coal power capacity retirements for the US and to coal power capacity additions for China. Other fuels include all other power generation technologies not explicitly listed, including batteries, biomass, geothermal, diesel, etc. For the US, future power generation capacity is based on the EIA power generation capacity schedules and peak demand growth is based on 2022-2025 average growth rates. For China, we forecast future power generation capacity based on China's energy transition targets and the 15th Five-Year Plan, and forecast peak demand growth based on the relationship between total power generation growth and GDP growth in 2021-2025 and our economists' GDP growth forecasts, adjusted for higher data center power demand growth that the IEA forecasts to exceed the current trend.

Source: IEA, Wind, EIA, Goldman Sachs Global Investment Research

Riding Energy Supply Waves

We expect micro-fundamentals, namely supply waves, to be the main driver of oil and natural gas prices over the next few years. The main difference is that we expect the 2025-2026 oil supply wave to be shorter lived than the 2025-2032 global gas supply wave (Exhibit 2), implying a shorter-lived period of downside pressure on oil prices vs. European natural gas and global liquefied natural gas (LNG) prices.

2026 Oil Surplus

Prices Down in 2026 on Last Big Supply Wave

We forecast Brent/WTI to decline further to 2026 averages of \$56/52 (vs. \$59/56 forwards) as the last big supply wave leaves the market in a 2.0mb/d oversupply, roughly in line with the rise in global visible oil stocks over the past 90 days (Exhibit 12).

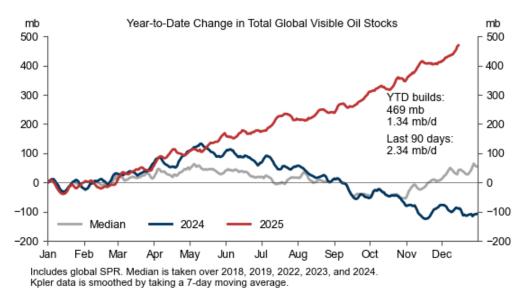


Exhibit 12: Recent Large Oil Inventory Builds Support Our 2.0mb/d 2026 Surplus Forecast

Source: Kpler, IEA, DOE, Fujairah, Singapore Enterprise, Longzhong, OilChem, PAJ, ARA PJK, Euroilstocks, Goldman Sachs Global Investment Research

Barring large supply disruptions or OPEC production cuts, lower oil prices in 2026 will likely be required to rebalance the market after 2026. We expect the 2026 surplus to lead to an acceleration in OECD commercial stocks builds in 2026 (as the recent extreme pace of stockpiling on water moderates), further reducing timespreads (the difference between prompt and deferred prices along the forward curve).⁵

Our base case is that oil prices bottom in mid-2026 as moderately forward-looking markets start to see rebalancing mechanisms, namely solid demand growth of 1.2mb/d in 2026, a further reduction in Russian supply (assuming the war and sanctions continue), and slowing non-OPEC ex Russia supply as low prices take their toll and the 2025-2026 supply wave ends.

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⁵ We assume China oil stockpiling, which tends to be price-sensitive, accelerates from 0.3mb/d in 2025 to 0.5mb/d in 2026.

We see net downside risks to our 2026-2027 oil price outlook, with Russia as the key swing factor. Prices could undershoot our forecast in a Russia-Ukraine peace deal scenario (with Brent averaging \$51 in 2026) where Russia production gradually recovers or in a GDP slowdown scenario. However, prices could overshoot our forecast if an intensification in attacks on Russian oil infrastructure/sanctions reduces Russia supply more quickly than in our base case.

Estimated Brent Spot Price \$/bbl \$/bbl Russia Production Drops 1mb/d Below Base Case by Dec27 85 85 GS Baseline (Russia Production Declines to 9.0mb/d by Dec27) Forwards 80 80 2026 GDP Slowdown Russia Production Recovers to 11.3mb/d by Dec27. Oil on Water Falls by 50mb 75 75 70 70 65 65 60 60 55 55 50 50 45 45 40 40 Jul-25 Oct-25 Jan-26 Apr-26 Jul-26 Oct-26 Jan-27 Apr-27 Jul-27 Oct-27 Jan-28

Exhibit 13: We See Russia Production as the Key Risk to Our 2026-2027 Price Forecasts

We estimate Russia liquids production at 10.1mb/d in 2025Q4.

Source: Goldman Sachs Global Investment Research

Prices Up Later

We assume oil prices pick up in 2026Q4 as the market starts pricing a return to a deficit in 2027H2 and shifts focus to incentivizing long-cycle production. We forecast Brent/WTI prices to gradually recover to \$80/\$76/bbl by late 2028 to spark investment to 1) balance the market in the early 2030s, 2) make up for natural declines of old fields, and 3) meet demand we expect to grow through 2040. We see the risks to our long-run oil price forecast as skewed to the downside on net as continuing efficiency and productivity gains (e.g. US shale) and/or geopolitical normalization (e.g. Russia and Venezuela) may lead to stronger long-run supply.

Global Gas Glut

In natural gas, 2025 has been year one of what we see as seven years of sizable global LNG export capacity additions from projects that have reached FID (Financial Investment Decisions) over the past seven years, with FID numbers exacerbated by the 2022 rally in global gas prices during the European energy crisis. As a result, we expect global LNG supply to increase by over 50% by 2030 vs 2024, a pace far faster than what we've observed for LNG demand growth in recent years. Given limited gas storage capacity globally, it follows that LNG prices will likely have to decline significantly as this oversupply builds to incentivize additional demand to absorb this glut and prevent congestion at global gas storage facilities.

Importantly, with the US as the primary driver of this LNG supply growth, from a US gas

market perspective this represents export demand for US gas. These higher exports, in turn, tighten the US gas market, supporting US gas prices higher in 2026/27 vs 2023-2025 in order to incentivize enough US gas production growth to help service these export terminals while managing gas inventories at comfortable levels.

This global gas trade dynamic sets the stage for ex-US gas markets to soften progressively relative to US balances, leading to lower European gas (TTF) and global LNG prices relative to US gas prices, effectively narrowing the TTF-Henry Hub spread from \$8.40/mmBtu this year to \$5.40/\$3.05 in 2026/27. Specifically, we forecast 2026/27 TTF at 29/20 EUR/MWh (\$10/\$6.85/mmBtu) to incentivize additional gas demand, while we expect 2026/27 US gas prices to incentivize US gas production growth at \$4.60/\$3.80/mmBtu.

In particular, as global LNG supply continues to grow faster than demand, we estimate NW European storage will face congestion in 2028/2029, pressuring TTF low enough to reduce global LNG supply by making US LNG exports uneconomic to flow, much like in 2020. We expect the resulting cancellation of US exports to, in turn, soften the US gas market and likely pressure Henry Hub sharply lower, pulling TTF further down to keep the US export arb closed, as European storage would still need balancing via a reduction in LNG supply.⁶

Post 2030, we see the potential for significant incremental LNG demand, driven by China's decarbonization efforts and higher infrastructure investment elsewhere in Asia, ultimately leading to a rebalancing (and eventual re-tightening) of global LNG markets.

Once the market has to resort to LNG supply curtailments to help prevent European storage congestion, this means TTF is likely to price below the variable costs of exporting LNG out of the US, the marginal producer, which is calculated as a function of Henry Hub prices (typically 115% of Henry Hub, plus variable costs of shipping and of regasifying the LNG onshore to Europe). As a result, if TTF moves below such Henry Hub-based variable cost of US LNG, and in turn Henry Hub responds by moving lower, TTF would need to sell off further to remain below the henry Hub-based variable cost of exports

Natural Gas Prices \$/mmBtu EUR/MWh TTF Realized (Right) -- Henry Hub Realized TTF GS Forecast (Right) - Henry Hub GS Forecast 60 20 TTF Forwards (Right) - Henry Hub Forwards 50 15 40 30 10 20 5 - 10 0 2024 2030 2031 2025 2026 2027 2028 2029

Exhibit 14: LNG Supply Wave=Lower Global Gas Prices & More Volatile US Prices

Source: S&P Global Commodities Insights, ICE, Goldman Sachs Global Investment Research

Long-Run Oil Over Global Gas Preference

We expect these differences in size and duration of the ongoing oil and LNG supply waves to lead to much lower European gas prices relative to oil in 2028/29 relative to what is currently priced into market forwards.

Appendix Table

Exhibit 15: We Again Expect Significant Return Differentiation Across Commodities and Relative Value Opportunities in 2026

			GS Forecast			
	Dollar Weight	2022	2023	2024	2025	2026
BCOM	100	16	-8	5	15	4
BCOM ex. Agriculture & Livestock	63	17	-10	8	19	5
S&P GSCI	100	26	-4	9	6	0
S&P GSCI ex. Agriculture & Livestock	74	25	-2	11	12	-1
Energy	47	42	-5	10	-6	-3
Industrial Metals	14	-8	-4	3	22	-6
Precious Metals	13	0	12	26	66	11
Agriculture	17	12	-8	0	-7	5
Livestock	10	5	0	20	25	1

We highlight the commodity indices ex Agriculture & Livestock because we currently don't forecast agriculture and livestock prices, and instead use forwards. The BCOM weights are: Energy (30%), Industrial Metals (15%), Precious Metals (19%), Agriculture (31%) and Livestock (5%).

Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 16: We Forecast the Gold Price to Rise to \$4,900 by Dec26

		GS Forecasts			Forward Pricing			Upside vs. Forward Pricing					
Commodities	Current Level	2026Q1	2026Q2	2026Q3	2026Q4	2026Q1	2026Q2	2026Q3	2026Q4	2026Q1	2026Q2	2026Q3	2026Q4
TTF Natural Gas (EUR/MWh)	27	30	30	29	28	27	26	26	27	10%	14%	11%	6%
Henry Hub Gas (\$/mmBtu)	3.65	4.50	4.50	4.50	4.83	3.46	3.58	3.83	4.44	23%	20%	15%	8%
WTI Crude Oil (\$/bbl)	55	54	50	50	53	55	55	56	56	-2%	-10%	-11%	-6%
Brent Crude Oil (\$/bbl)	59	58	54	54	57	59	59	59	59	-1%	-8%	-9%	-5%
LME Copper (\$/mt)	11,601	11,548	11,488	11,310	11,200	11,599	11,561	11,520	11,480	0%	-1%	-2%	-3%
LME Aluminum (\$/mt)	2,866	2,640	2,508	2,420	2,357	2,866	2,887	2,897	2,905	-9%	-15%	-20%	-23%
London Spot Gold (\$/toz)	4,342	4,230	4,433	4,628	4,815	4,332	4,380	4,426	4,467	-2%	1%	4%	7%
Iron Ore 62% Fe (\$/mt)	104	98	94	92	88	102	100	99	97	-4%	-7%	-8%	-11%

Source: Bloomberg, Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Daan Struyven, Samantha Dart, Lina Thomas, Eoin Dinsmore, Yulia Zhestkova Grigsby, Hongcen Wei, Aurelia Waltham, Lavinia Forcellese, Alexandra Paulus, Laura Cyr, Frederik Witzemann and Filippo Cuscito, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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