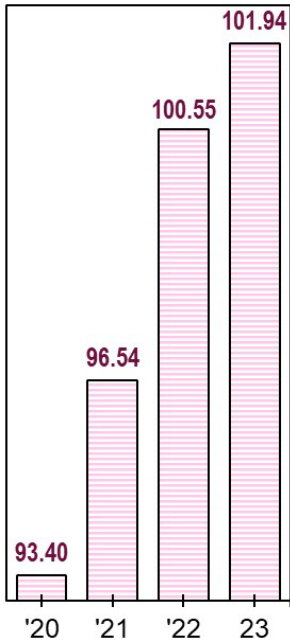


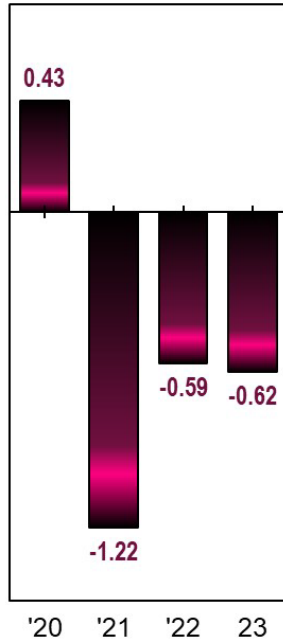


SOME ASSEMBLY REQUIRED...

Global Demand
MM b/d



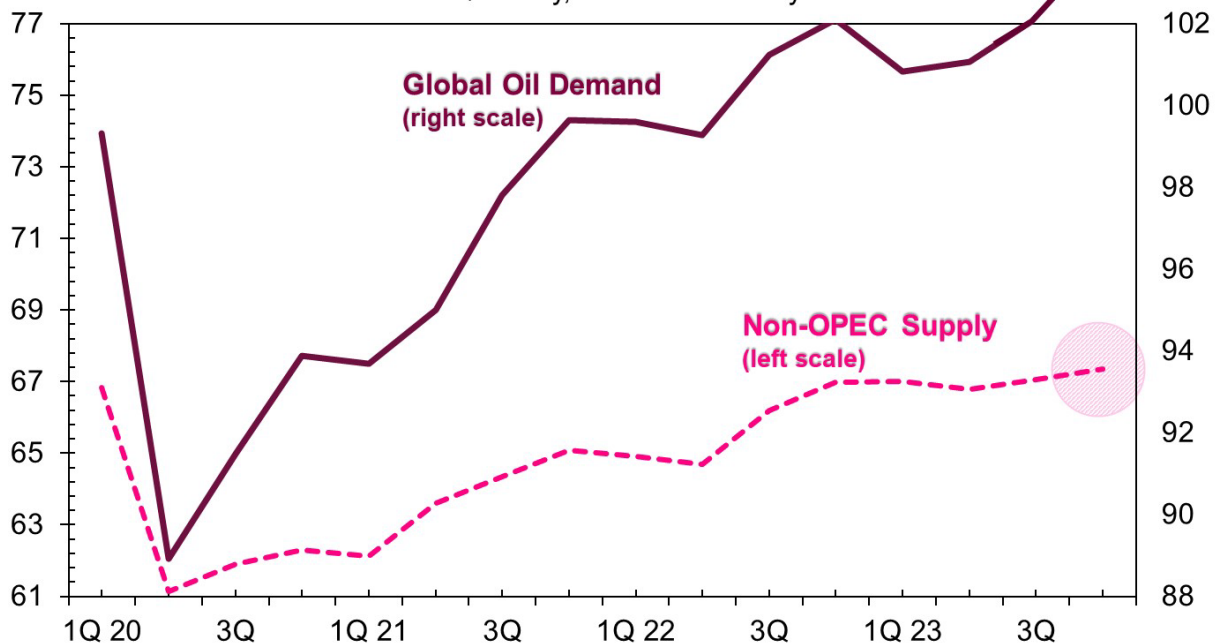
Inventory Change
MM b/d



Our updated oil balance model is detailed on the last page of today's report. In assembling the forecast we did revert to figures close to our original base case demand scenario but made allowances for a limited volume of fuel switching to oil from natural gas. Our China demand figure is still smaller than what the consensus projects, On non-OPEC supply we're still forecasting a lower-than-consensus gain with one notation being that for Russia. We are still using a figure that's about a million b/d above the consensus on prospects that a lack of alternatives supply makes the EU embargo more bark than bite. The analysis below continues to best encapsulate our medium term outlook: we see demand rebounding by a disproportionately larger volume than non-OPEC production. Eight years of large spending cuts on the upstream make calls for a "major rebound" in non-OPEC output tough to square. As seen left and as more detailed in our model, 2023 looks to be another year of inventory draws. This is not what is being projected by the consensus which is for yet another year of inventory building – and that call has been dead wrong since 2020.

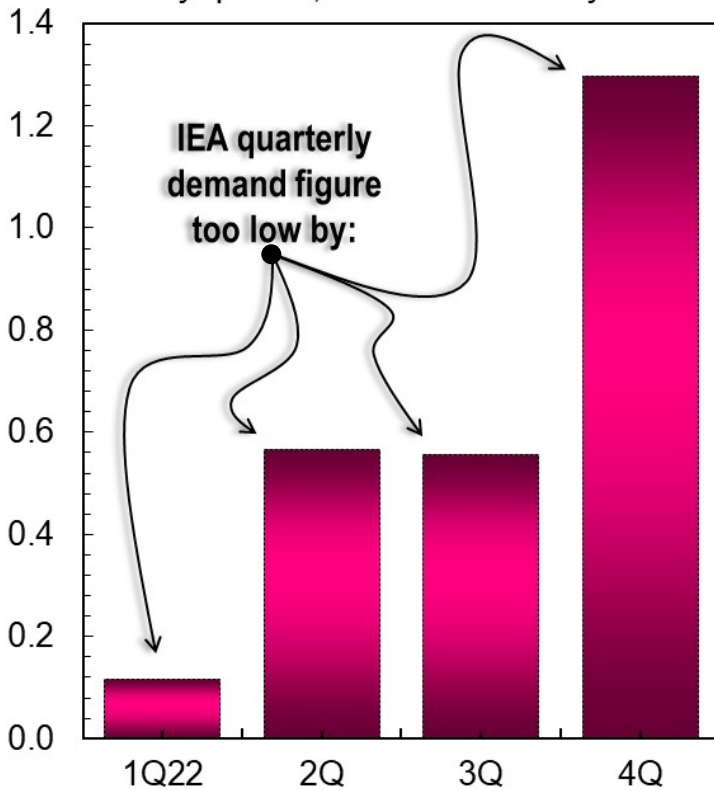
Global Oil Demand versus Non-OPEC Supply

Quarterly, Million barrels/day



IEA versus CA Demand Figures

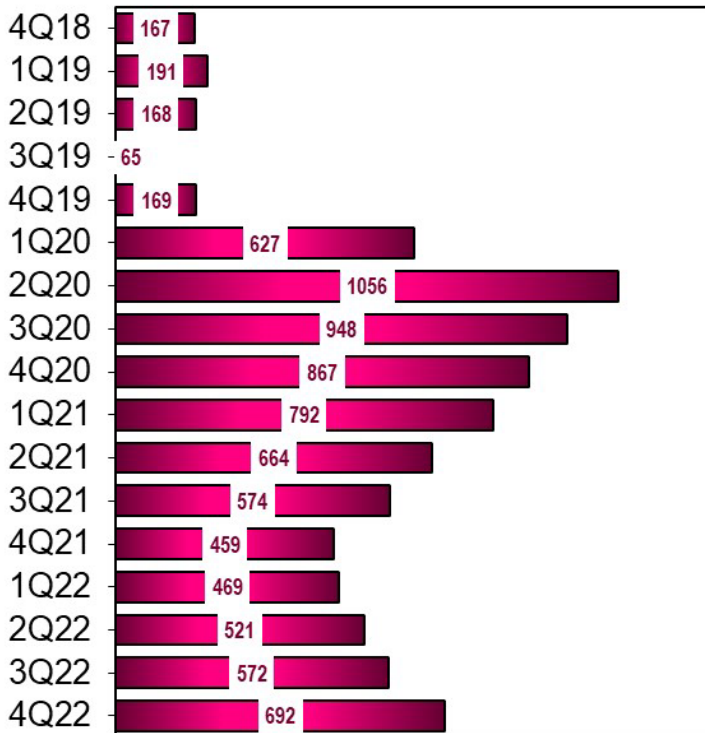
By quarter, Million barrels/day



The IEA did make a few upward revisions in demand in yesterday's report, but they're still way in the hole since 4Q 2018 with regard to the "missing barrel" tally. The pattern seen to the left for just 2022 is typical of the issue in that there's a concentration of undercounting demand in the final period of the year. At 692 million barrels (that's our figure for the end of this quarter), we're approaching a level that prompted a lawsuit back in 1999 against the IEA (it morphed into a congressional audit). Be that as it may, the situation essentially means that the consensus is working with too low a set of demand figures and too low a "call on OPEC crude." While some pundits will assert that the unaccounted for barrels are "on the water" waiting to make landfall, in the near-40 years we have been at this a missing barrel has never, ever shown up – the situation was resolved only after the IEA revised its demand series higher.

Accumulated "Missing Oil"

Since 4Q 2018, Million barrels



HAS CHINA'S OIL DEMAND TURNED THE CORNER?

Data released late yesterday for China's domestic refinery run rates are part of the math to estimate changes in its oil demand (as per our bottom analysis). Our work indicates that the country's oil use has run better than forecast since August (which ties into the recent upward revision in the 3Q figure – it still contracted year/year but by less than previously believed). The figure for apparent demand we estimate for November is the highest monthly figure for 2022 and puts the rate just a wee below the respective '21 level. The three recent monthly figures we generated suggests the 4th Kingdom has turned the corner on its oil consumption which is notable given global oil demand had exceeded even our forecast while China's oil use contracted in both the 2Q and 3Q periods.

