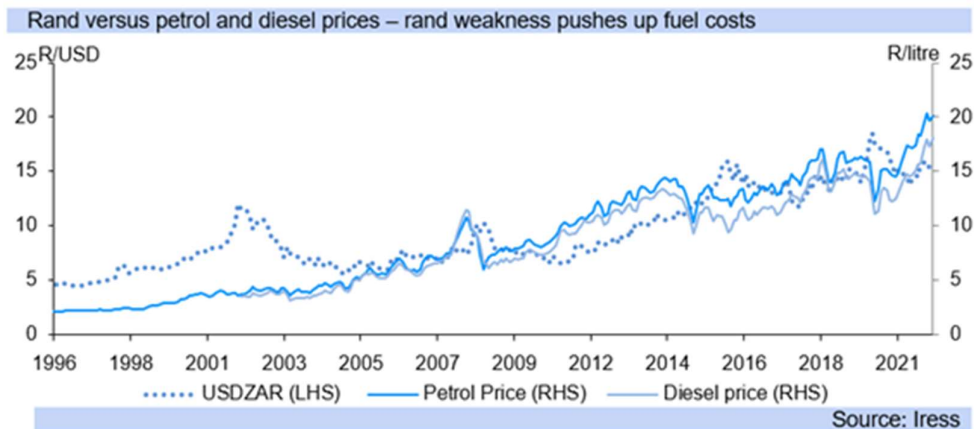
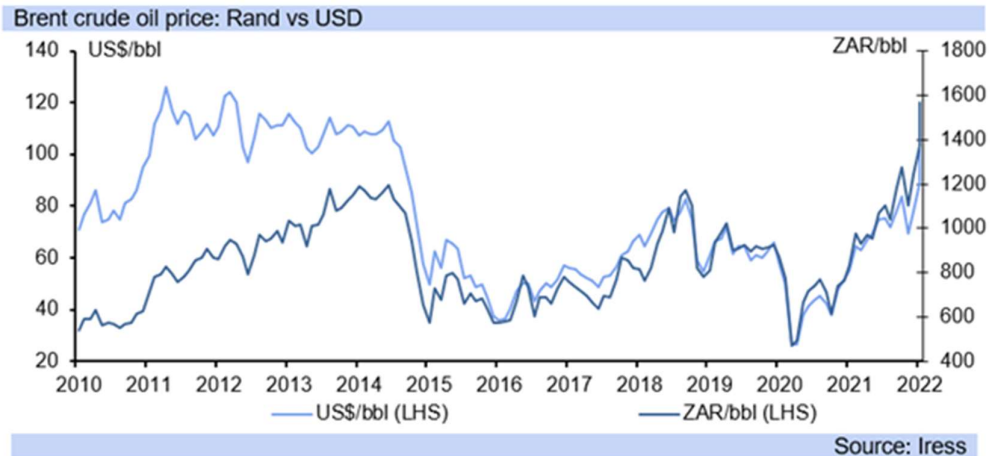
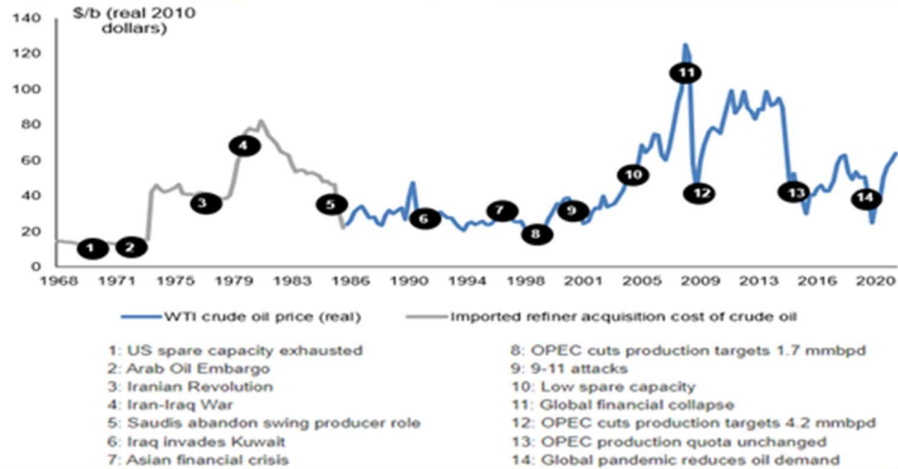


Thursday 24 February 2022

Oil note: the escalating Ukraine/Russian conflict has driven oil prices over US\$100/bbl, and they are likely to climb significantly higher on a further escalation of hostilities

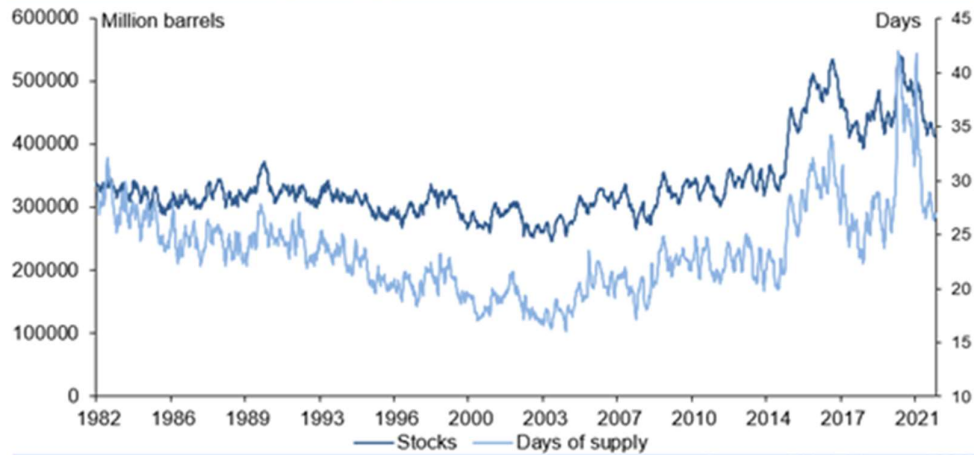


Crude oil prices and key geopolitical and economic events



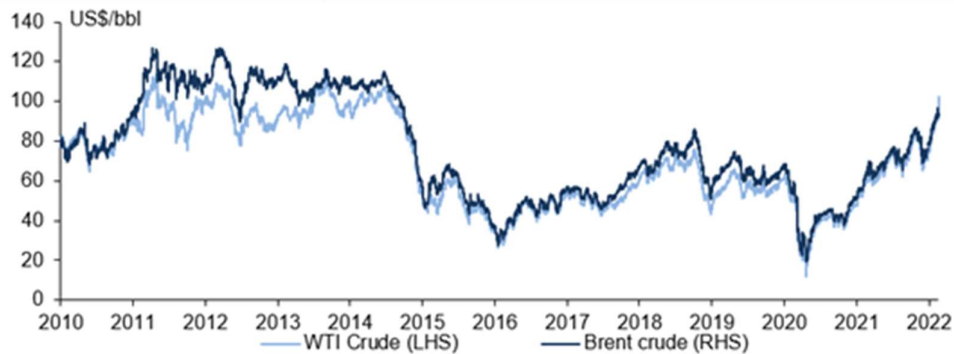
Source: EIA, Short-Term Outlook 2022

US crude oil stocks and days of supply



Source: EIA, February 2022

Brent crude oil vs WTI crude oil price



Source: Iress

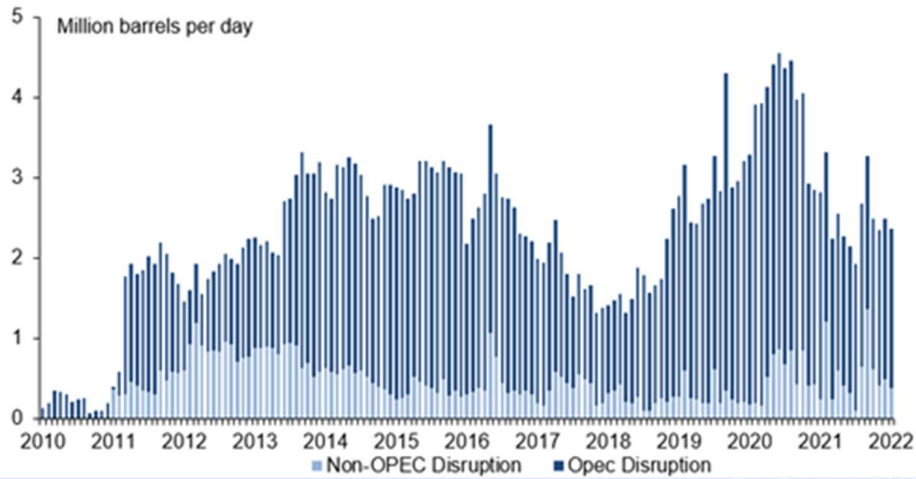
- The escalating Russian/Ukraine conflict started to have a more severe effect on financial markets, pushing the Brent crude oil price to US\$97/bbl yesterday (rand

R15.17/USD) and today to US\$102/bbl (R15.37/USD), with the potential for further escalation.

- For SA, which imports oil instead of exploring and extracting its own, higher oil prices from an escalation in the Russian/Ukraine conflict would push up inflation substantially, and the petrol price, already at R20/litre, towards R25/litre. A R1.26/litre increase is building for March.
- Indeed, were it not for some rand strength earlier in the month, the petrol price would be set to rise by R1.46/litre. South Africa's trade surplus, currency and government finances have all benefited from the strong export value of commodity prices in the past eighteen months.
- SA is a key commodity exporter (chiefly of metals, minerals and agricultural products), but the risks of severely escalated Russian/Ukraine hostilities is for lower commodity prices as markets would worry about the impact on global growth.
- OPEC+ however keeps its oil prices high by quota controls, and has already demonstrated supply shortage this year, bolstering the oil price above US\$80/bbl before the military tension in Eastern Europe got substantially underway.
- Russia is a key oil and gas exporter, and there may be little coincidence in the timing of its hostilities with the Ukraine now in the depths of the Northern Hemisphere winter, with Europe heavily reliant on oil, coal and gas.
- The initial impact of increased likelihood of war has been higher oil prices on feared further supply shortages in an already tight market. Precious metals have gained significantly on safe haven flows but some other (non-energy or precious metal) commodity prices have dropped.
- The futures market for commodities had been running very high this year, especially contracts for immediate delivery, but a severe (and inclusive of a number of countries) escalation in military conflict is likely to yield a slump, leading commodity prices lower.
- Russia is expected to persist with its aggressions, although these could wax and wane on interactions with the US/UK and others involved in attempting a peaceful resolution, but Russia is likely to push its objectives. The oil price will retain risks to its upside.

Please scroll down to the second section below

OPEC and non-OPEC supply disruptions



Source: EIA, February 2022

Note: This chart shows EIA's monthly estimates of unplanned, global supply outages. Estimated unplanned disruptions reflect the level of volumes shut-in, accounting for effective production capacity.

Probability of WTI spot price exceeding or falling below certain levels

Probability of WTI spot price exceeding certain levels



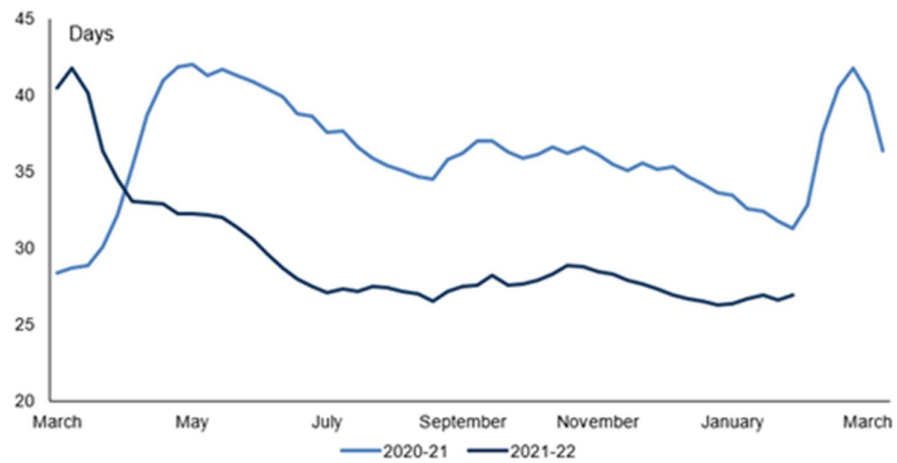
Probability of WTI spot price falling below certain levels



Source: EIA, Short-Term Outlook 2022

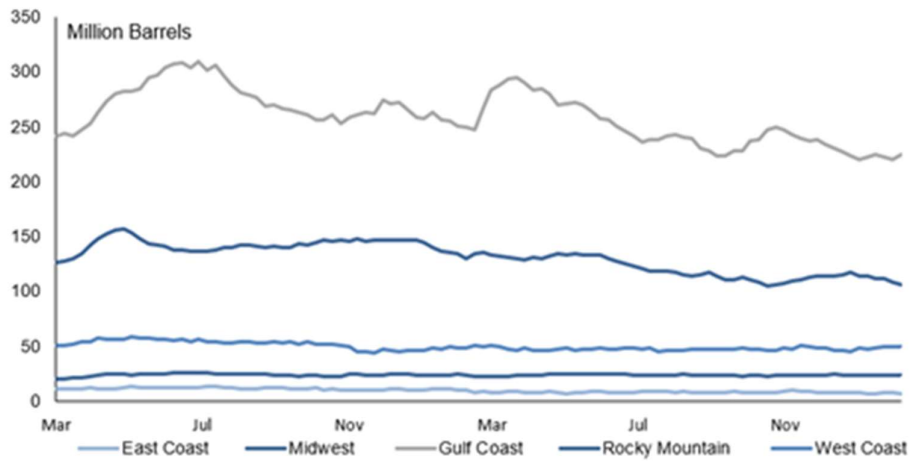
Notes: Probability values calculated using NYMEX market data for the five trading days ending February 3, 2022. Values not calculated for months with little trading in "close-to-the-money" option contracts.

US crude oil days of supply 2020/21 vs 2021/22

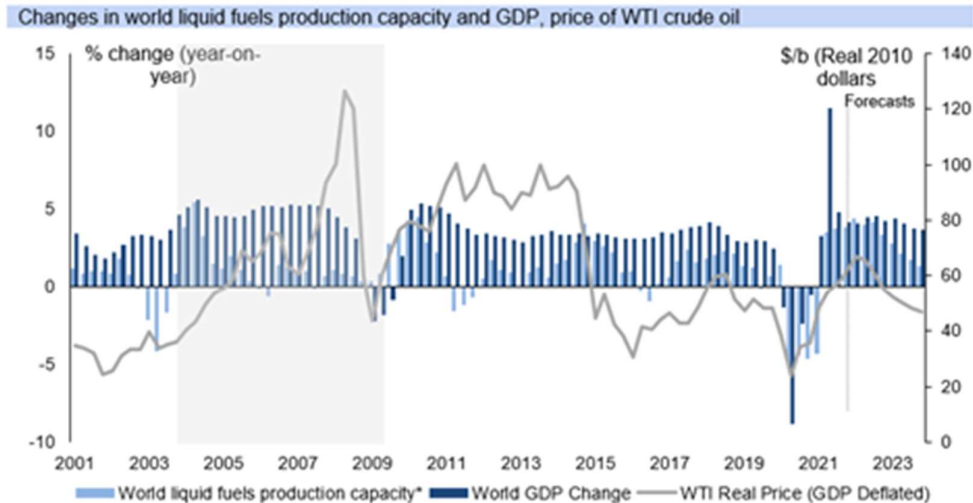


Source: EIA, February 2022

Regional crude oil stocks (million barrels)



Source: EIA, February 2022



Source: EIA, February 2022

Note: In this chart, WTI price levels are graphed with world GDP growth rates (as an indicator of global oil demand growth) and quarterly changes in world capacity, defined as OPEC capacity plus non-OPEC production (as an indicator of global oil supply growth). From 2005 to 2008, economic growth remained strong while oil production capacity grew slowly and even declined in some quarters. The tight market conditions put upward pressure on oil prices.

- Russia's invasion of the Ukraine, reported today by land, sea and air, is seen as the most significant attack in Europe by one country on another since WWII, and this has raised concerns for WWIII, and so weakened the commodity price run.
- The attacks have seen missiles hitting Ukrainian cities, Russian troops streaming into the Ukraine and Russian ships offloading equipment and military personal. The country is under martial law.
- Ukraine's Foreign Minister, Dmytro Kuleba, reports that President Putin had "launched a full-scale invasion of Ukraine". Ukraine has stopped civilian flights on high risks to safety, and Russia suspended domestic flights at airports near the Ukrainian border until March 2.
- Kyiv has reported a full scale attack against its key points, chaos in the city and electricity has been cut off. The US's President Biden has responded with plans for severe sanctions against Russia.
- The Ukraine declared a state of emergency earlier in the week and Putin's chief of staff and defense minister are blacklisted by the EU. Europe is increasingly stacking up against Russia with disapproval but not any active plans to engage outright in the conflict.
- Instead, support has been bolstered for the UN's peacekeeping operations. The European Union's foreign policy chief, Josep Borrell, is reported to have warned that Russia will see "unprecedented isolation" and receive the "harshest sanctions" the EU can impose.
- Germany is reported to have said it was a "shameless breach of international law" and the UK that the invasion of the Ukraine is "unprovoked, unjust" and it was a "dark day for Ukraine". The heavy attack may lead to the Ukraine capitulating and Russia achieving its aims.
- An extension of the conflict instead well into March, and even April, and a multi-country engagement, would provide the deepened concerns that financial markets need to turn severely risk-off. The oil price would be at risk of nearing US\$150/bbl quickly, and beyond.

- No-one gains from war with the destruction of human life, infrastructure and economic activity it brings. For SA well removed from the conflict, higher inflation and imported oil prices will be the result as it continues to import its oil, as opposed to explore, extract and use its own oil.

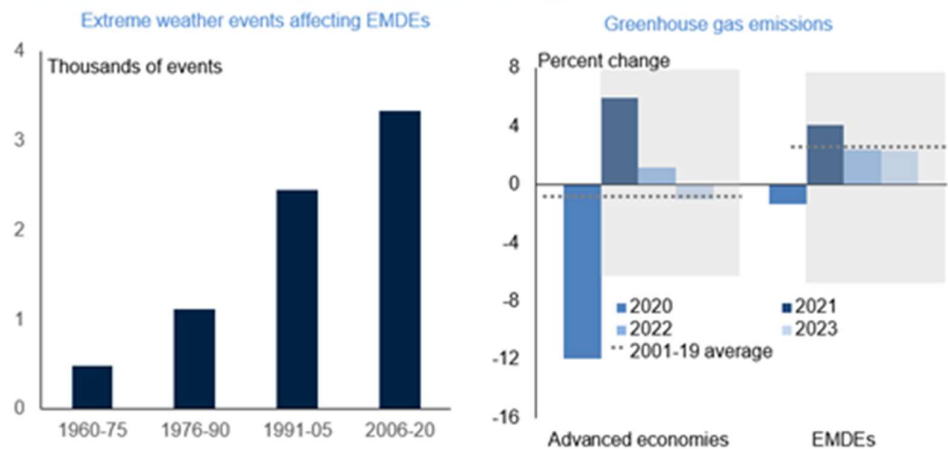
West Texas Intermediate (WTI) crude oil price and NYMEX confidence intervals



Source: EIA, Short-Term Outlook 2022

Note: Confidence interval derived from options market information for the five trading days ending Feb 3, 2022. Intervals not calculated for months with sparse trading in near-the-money options contracts.

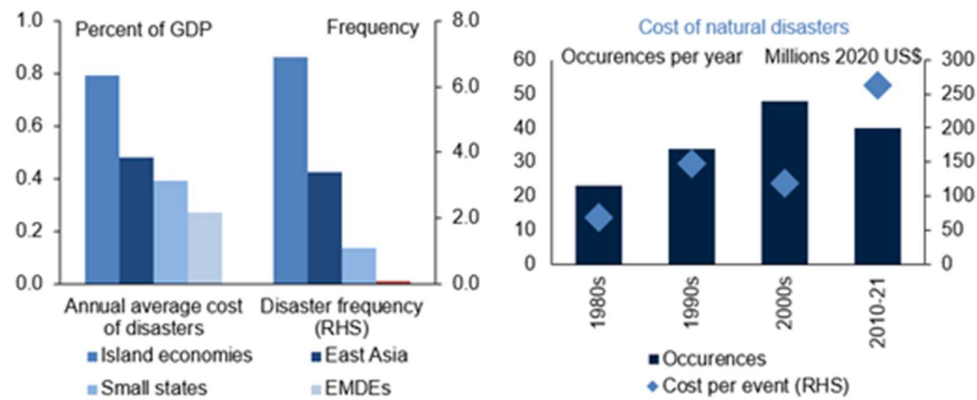
Extreme weather events affecting EMDEs and Greenhouse gas emissions



Source: World Bank

Note: EMDEs = emerging market and developing economies. Greenhouse gas (GHG) emissions projections assume constant GHG emissions per unit of GDP over 2019-23. Sample includes 34 advanced economies and 107 EMDEs. Advanced-economy forecasts obtained from the Oxford Global Economy Model. Shaded areas indicate forecasts.

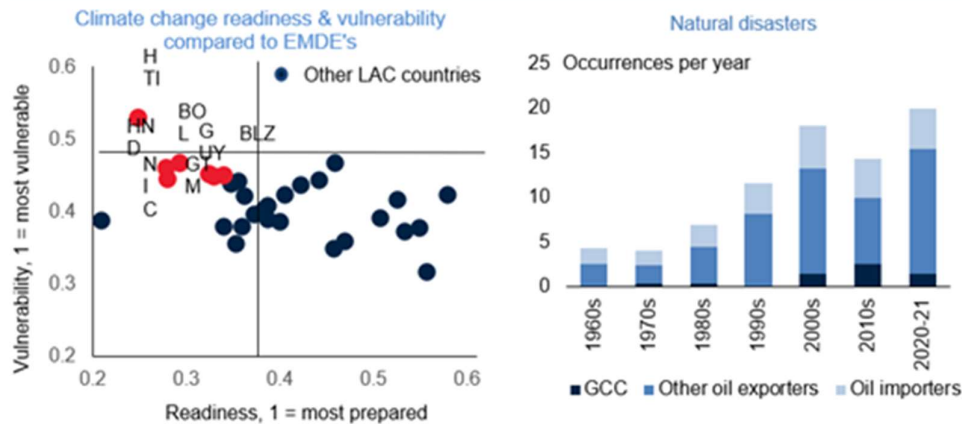
Natural disasters, 1980-2021 and cost associated with them



Source: World Bank

Note: Note: EMDEs = emerging market and developing economies. East Asia = Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, the Philippines, Thailand, and Vietnam. Island economies = Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu. Disaster frequency is calculated based on the annual average number of natural disaster incidents from 1980-2021 per 10,000 square kilometers of land area. Cost per event* data are deflated using regional GDP deflator.

Climate change readiness & vulnerability compared to EMDE's and natural disasters



Source: World Bank

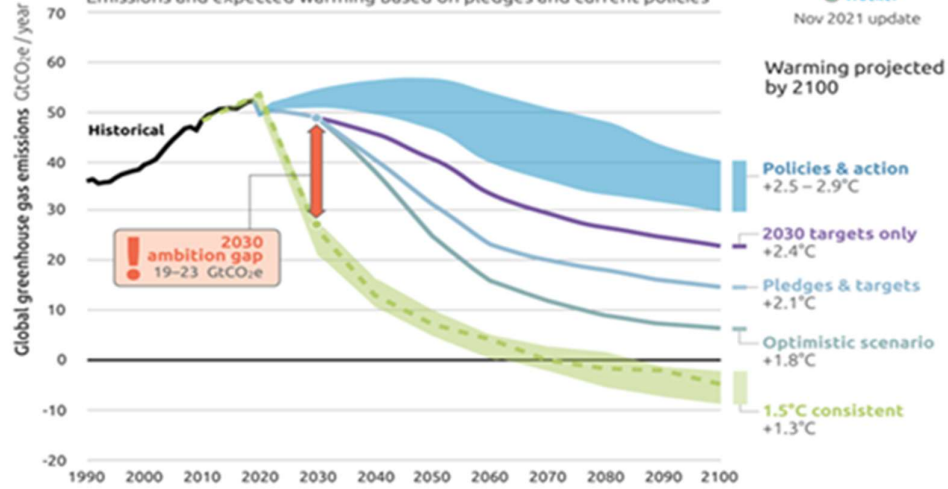
Note: BLZ = Belize, BOL = Bolivia, GTM = Guatemala, GUY = Guyana, HND = Honduras, HTI = Haiti, NIC = Nicaragua. Horizontal and vertical lines are medians for all emerging market and developing economies. Note: GCC = Gulf Cooperation Council. Includes data for 19 MENA economies. Data for 2021 are partial and reflect available information to December 16, 2021.

2100 WARMING PROJECTIONS

Emissions and expected warming based on pledges and current policies



Nov 2021 update



Source: IPCC