

Natural Gas Prices and the UN Development Agenda

December 13, 2021

Leslie Palti-Guzman, Founder and President of Gas Vista

A Market Intelligence and AI Company Focused on Energy Trade Flows and Predictions



**SUSTAINABLE
DEVELOPMENT GOALS**

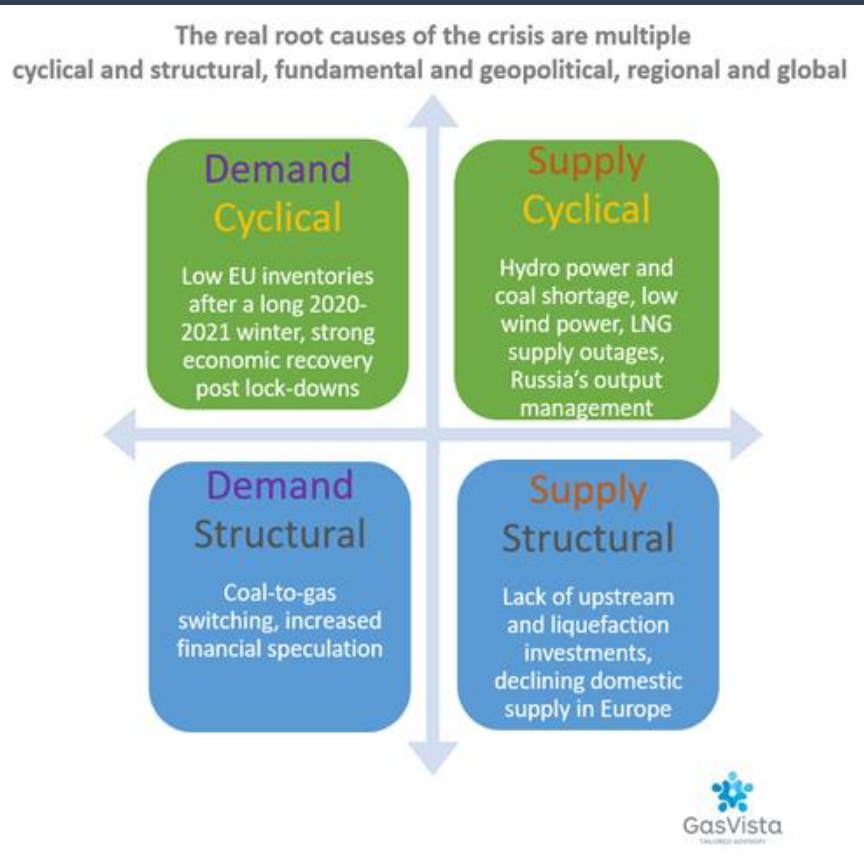
17 GOALS TO TRANSFORM OUR WORLD



State of Play:

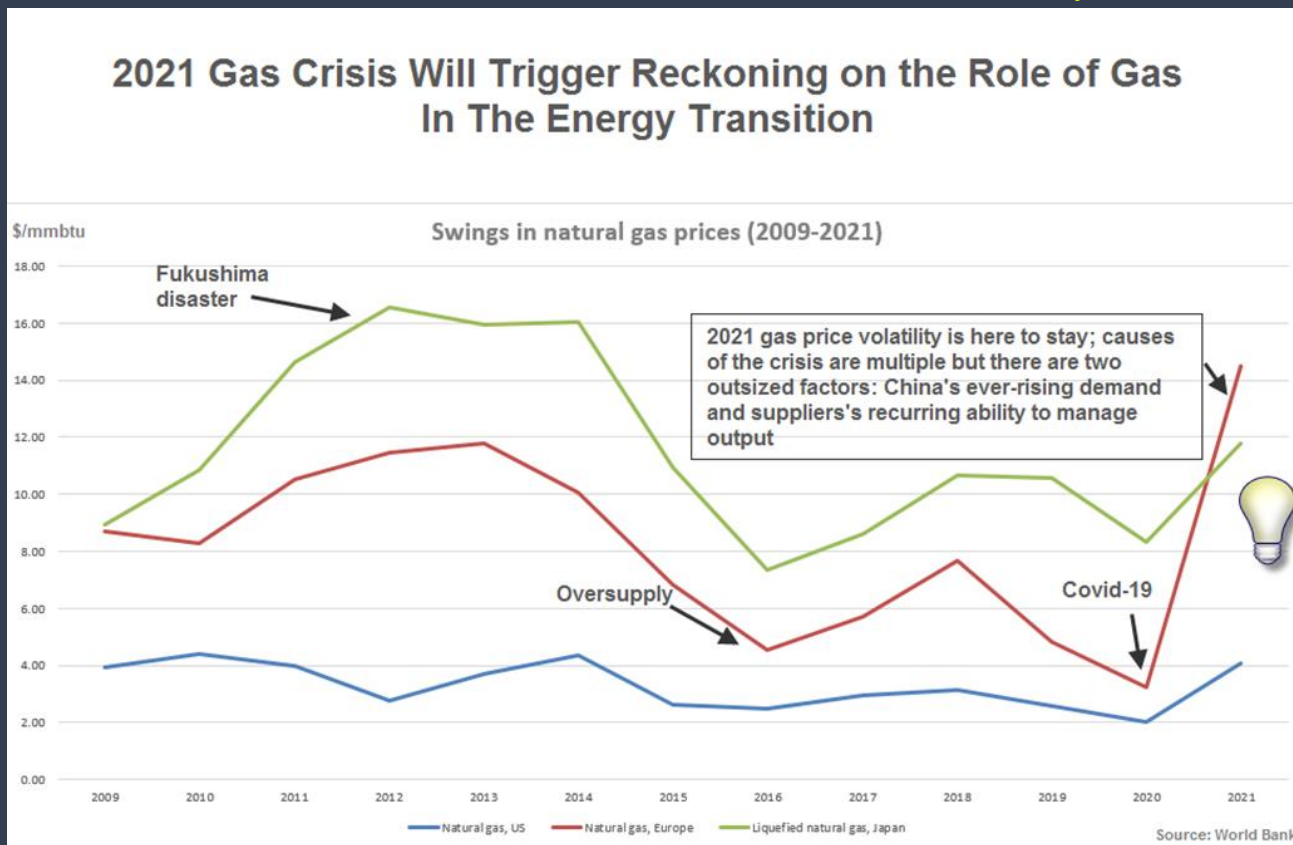
This energy crisis is already having very concrete consequences for households, businesses and the global economy due to inflationary pressures.

In some countries gas price increases have been passed on to consumers and industrial users that could in turn slow post-pandemic economic growth.



Winter Gas and Spot LNG Prices Will Remain in Double Digits in Asia and Europe

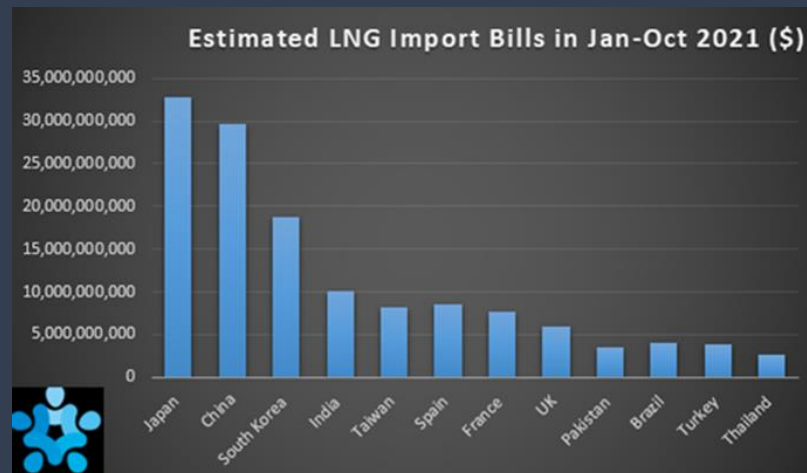
We cannot rule out a 4Q21/1Q22 Russia-driven bearish surprise in Europe



Risk factor #1 : Economic Recovery Faces Setback

High Gas Prices Challenge **Energy Access** and **Industrial Competitiveness** in **Emerging Markets**

- The most price-sensitive emerging markets (e.g. Pakistan, Thailand) will see either a noteworthy LNG import decline or disappointing growth amidst skyrocketing import bills.
- Mitigation strategies include:
 - **Power outages**
 - **Electricity rationing** (industry consumers will suffer shortages)
 - **Fuel switching** to fuel oil, diesel and coal for power generation (e.g. China, India, Bangladesh, Moldova)
 - **Closure of fertilizer units and energy-intensive industries** (e.g. China)
- Lost industrial demand may not easily return, if companies go bankrupt or switch fuels.



Risk factor #2 : Coal Alternative is the Worst Scenario in the Fight Against Climate Change

High Gas Prices Leads to Gas-to-Coal Switching

- The theory: Competitive gas prices enable a faster demise of coal in several parts of the world (South America, China, India, Southeast Asia)
- But unsustainable winter spot LNG prices--currently ~\$35/mmbtu for most of Asia-- leave many economies, vulnerable and thirsty for dirty coal.
- Coal still contributes to around 60% of China's power consumption.
- Beijing announced the end of its financing of coal-fired plants outside China but it will continue to use **coal at home as a balancing role** especially in the current pricing environment.
- **Air pollution** in China and India remains a salient health issue, contributing to millions of premature deaths.

It's in the air

In 2018, fossil fuel pollution caused nearly

1 in 5 global deaths

Nearly 90%

of the world's most polluted cities are
in China and India

However, due to shutdowns in 2020,

84% of countries

monitored by IQAir saw a drop in air pollution, including:

Beijing
-11%

Delhi
-15%

Seoul
-16%

Source: Harvard University research, IQAir and Greenpeace

Risk factor #3 : LNG Infrastructure Delay

Governments May Review Downward the Future Share of Gas/LNG

South Asia and Southeast Asia: will add a large number of regas capacity to the global LNG market (e.g. Philippines, Vietnam, Sri Lanka), but delays and cancellations will continue to occur, damping expectations.

Central America: Small-scale LNG imports will boom in El Salvador, Nicaragua, opening doors to other markets later.

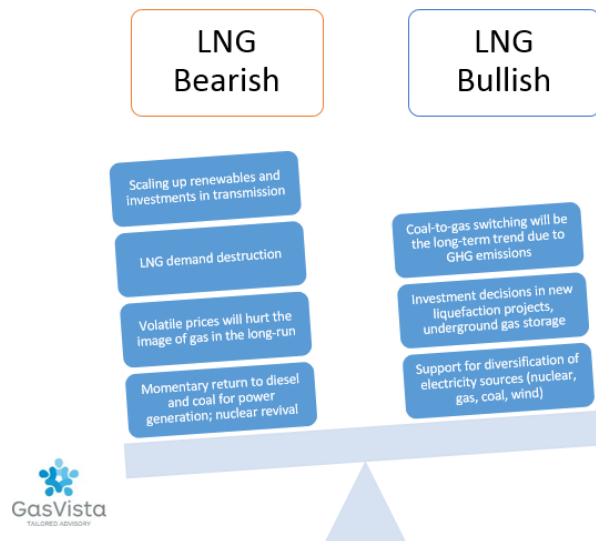
First-time LNG Importers (regas capacity in mtpa)					
Country	2021	2022	2023	2024	2025
Croatia	1.9	1.9	1.9	1.9	1.9
Ghana	2.0	2.0	2.0	2.0	2.0
Nicaragua	0.5				
Bahrain		6.0	6.0	6.0	6.0
El Salvador		0.5	0.5	0.5	0.5
Benin		0.5	0.5	0.5	0.5
Cyprus		0.4	0.4	0.4	0.4
Philippines			3.0	3.0	5.2
Mozambique			0.5	0.5	0.5
Ecuador			0.5	0.5	0.5
Australia			1.8	1.8	1.8
Sri Lanka			0.5	0.5	0.5
Sierra Leone				0.2	0.2
South Africa				1.3	1.3
Albania				1.9	1.9
New Caledonia				0.5	0.5
Vietnam				5.0	6.0
Germany					13.3
Morocco					5.2
Total Additional Import Capacity (mtpa)	4.4	7.4	6.3	11.2	26.7

Risk factor #4: European Electricity Crisis Becomes An Infrastructure Crisis

Unsustainable Energy Prices Could Threaten Climate Agenda and Acceptance

- Short-term: Several European countries could face blackouts and increased gas rationing for industrial use in order to prioritize home heating.
- Medium-term: High European energy prices will add inflationary pressures and lead to higher material costs resulting in missing (electric and energy) infrastructure & investment and thus weakening security of supply, which in turn will increase electricity prices.
- A continuous energy crisis could put Europe in a state of high stress fueling European divisions, discontent, populism, and potentially causing the end of Europe's energy liberalization and Green Deal.

High European Gas and Electricity Prices Will Have More LNG Bearish Consequences

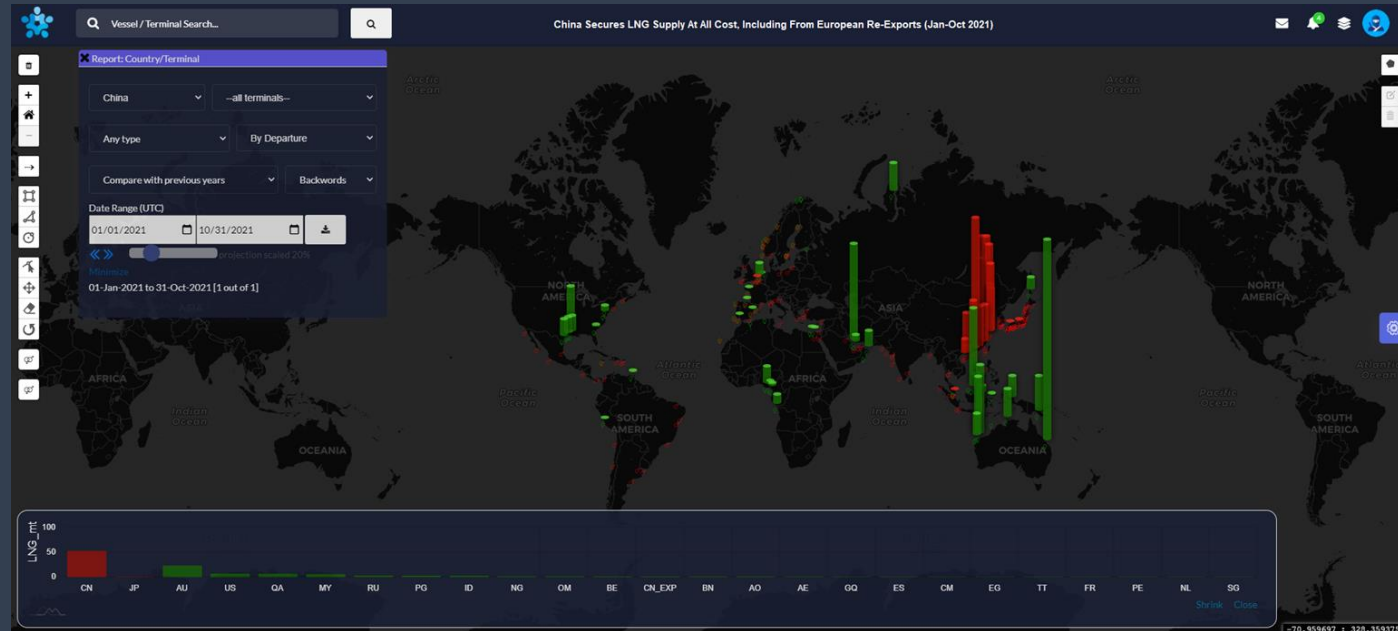


What's next?

China Will Continue to Resist High Gas and LNG Prices Through Different Strategies

But its Ever-Rising Demand will Continue to Trigger Price Volatility In Coming Years

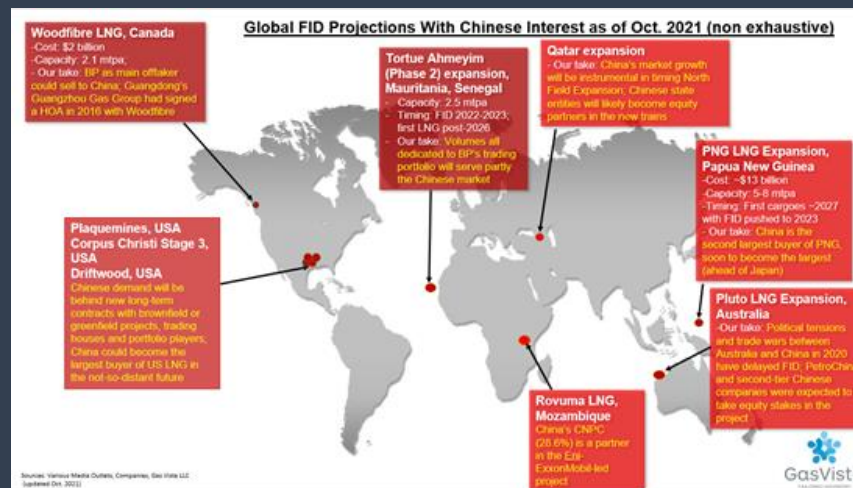
- China's demand for LNG will keep rising as it will continue to be a cornerstone of Beijing's energy transition.
- But gas needs to prove its affordability.
- Beijing will deploy its market clout and political might to lower prices by **contracting and pouring Chinese capital** into new liquefaction projects.
- China will need additional supplies from Australia, US, Qatar and Russia.



US LNG To The Chinese Rescue

China Will Become the US first LNG trade partner, Climate Cooperation Likely

- Economic growth in developed and developing Asian markets will continue to absorb the bulk of US LNG exports.
- The largest destination for US LNG will soon become China, overtaking South Korea and Japan.
- US LNG can help with gas affordability by keeping the longer-term global gas market abundant.



Current Gas Crisis Will Trigger Reckoning over the Role of Gas in the EU Energy Transition

Including the role of US LNG in keeping global gas prices competitive

- Natural gas is not going away: Natural gas will continue to be important in Europe to ensure **reliability** and **energy security** during the energy transition.
- Power mix is country-specific: The EU will continue to fund coal-to-gas switching projects in cases where leapfrogging to renewable power generation is not possible and after making sure it won't constitute a locked-in asset.
- Future-proof infrastructure for 'clean' gases: The EU will support conversion of gas infrastructure to make room for hydrogen and biogas/biomethane.
- On the road to 2030 and then 2050: The role of unabated gas will drastically diminish, especially in power generation.



We will hear more from EU Energy
Commissioner, Kadri Simson
(previously Estonian economy minister 2016-19)

*“While cheaper renewables play an increasing role in supplying the electricity grid and setting the price, **other energy sources, including gas, are still required in times of higher demand.**”* EU [Press Release](#), Oct. 13, 2021

Conclusion

This energy crisis is already having very concrete consequences for the global economy due to inflationary pressures.

There are 4 concrete risks to UN Sustainable goals: 1) Economic recovery faces setback, 2) Coal alternative is the worst scenario in the fight against climate change; 3) LNG infrastructure delay; 4) Unsustainable European electricity prices could threaten climate agenda and acceptance.

- **Gas is not going away.** Gas crisis will trigger reckoning on the role of gas in the energy transition.
- **Sky-high gas and LNG prices won't last beyond this winter.**
- But **LNG price volatility is here to stay:** Seasonality, China's ever-rising demand and suppliers' output management will continue to trigger price swings in coming years.
- \$8/mmbtu? There is a **sweet spot** for gas and LNG prices that works for both importers and exporters, high enough to spur new investments, and low enough to encourage fuel-switching to gas and be affordable to the most price-sensitive markets.
- **New gas and LNG investments will be needed during the energy transition to balance supply and demand**, but they will have to meet new **green** standards/criteria.
- Asia will continue to drive gas demand, investments and absorb the bulk of LNG trade, but Europe will remain gas dependent with new LNG/hydrogen 'hubs'.

THANK YOU