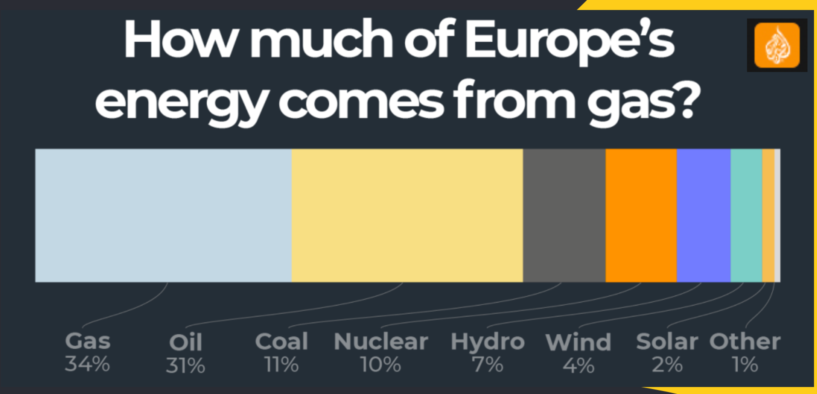
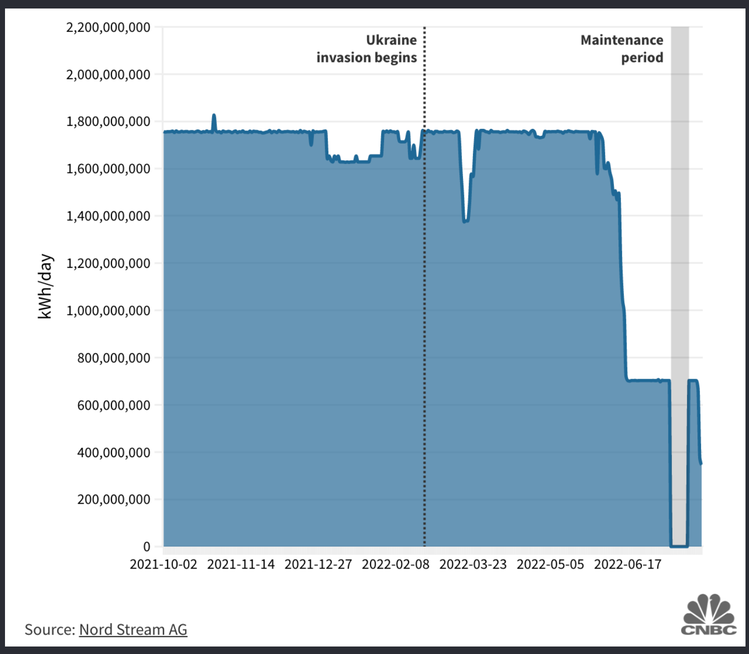
NATURAL GAS SHORTAGE IN EUROPE

1 PROBLEMS



Europe rely on Russia gas because it has the world's largest reserves natural gas and cheaper than alternatives. However, significant Russian gas flows were being blocked from reaching Europe, and the high political tensions over Ukraine corresponds with the decreasing Russian gas flows to Europe.

Gas supply fall at Nord Stream 1 (one of Europe's offshore natural gas pipelines)



- Russia supplies approximately 40% of European annual gas consumption.
- EU imports up to 90% of the natural gas consumed.

2 CAUSES & EFFECTS

CAUSES

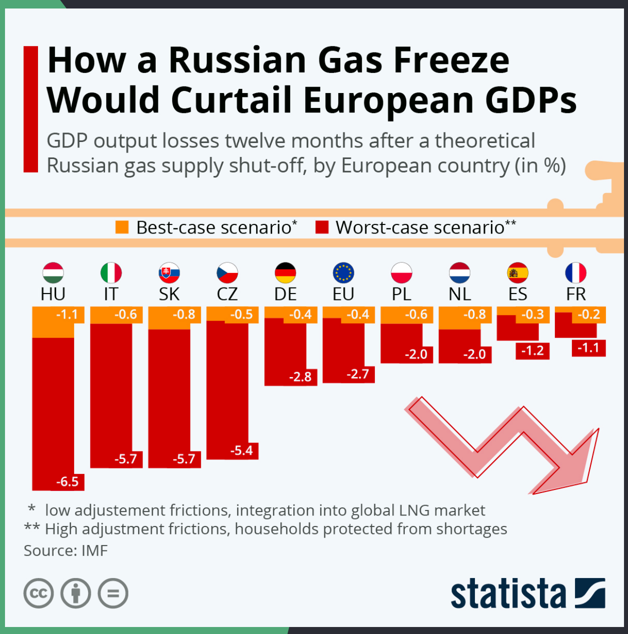
- Since the Western economic sanctions on the Russian oligarchs and companies as a retaliatory measure for invading Ukraine, the relationship among the nations deteriorate.
- Russia was preventing a great amount of gas from entering Europe.

EFFECTS

- Artificial tightness in the market
- Price of gas rises
- Incoming gas shortage in the winter
- Need to find other sources for electricity and heat
- Rapid increase in total household expenses - lower disposable income
- Firms could face production shutdowns and equipment damages
- GDP shrinking from less economic activities
- Possible goal achievement (IEA Net Zero Emissions Roadmap)

+ ECONOMIC INSIGHTS

- The unprecedented gas shortage due to government intervention in global politics is leading Europe into a recession as gas price for both households and firms continue to rise.
- The extreme hike in gas price level and the energy supply insecurity increase the opportunity cost of relying on natural gas supply.
- Following the crisis, there is a greater incentive to shift away from natural gas towards revisiting coal and nuclear power plants among the European countries.
- European eco-friendly energy transformation policies could be disrupted, affecting many related industries(eg. renewable energy industry).



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