

# Supply Chain Issues



Mark Sciarrotta  
Operating Committee  
November 2021

# Major supply chain issues

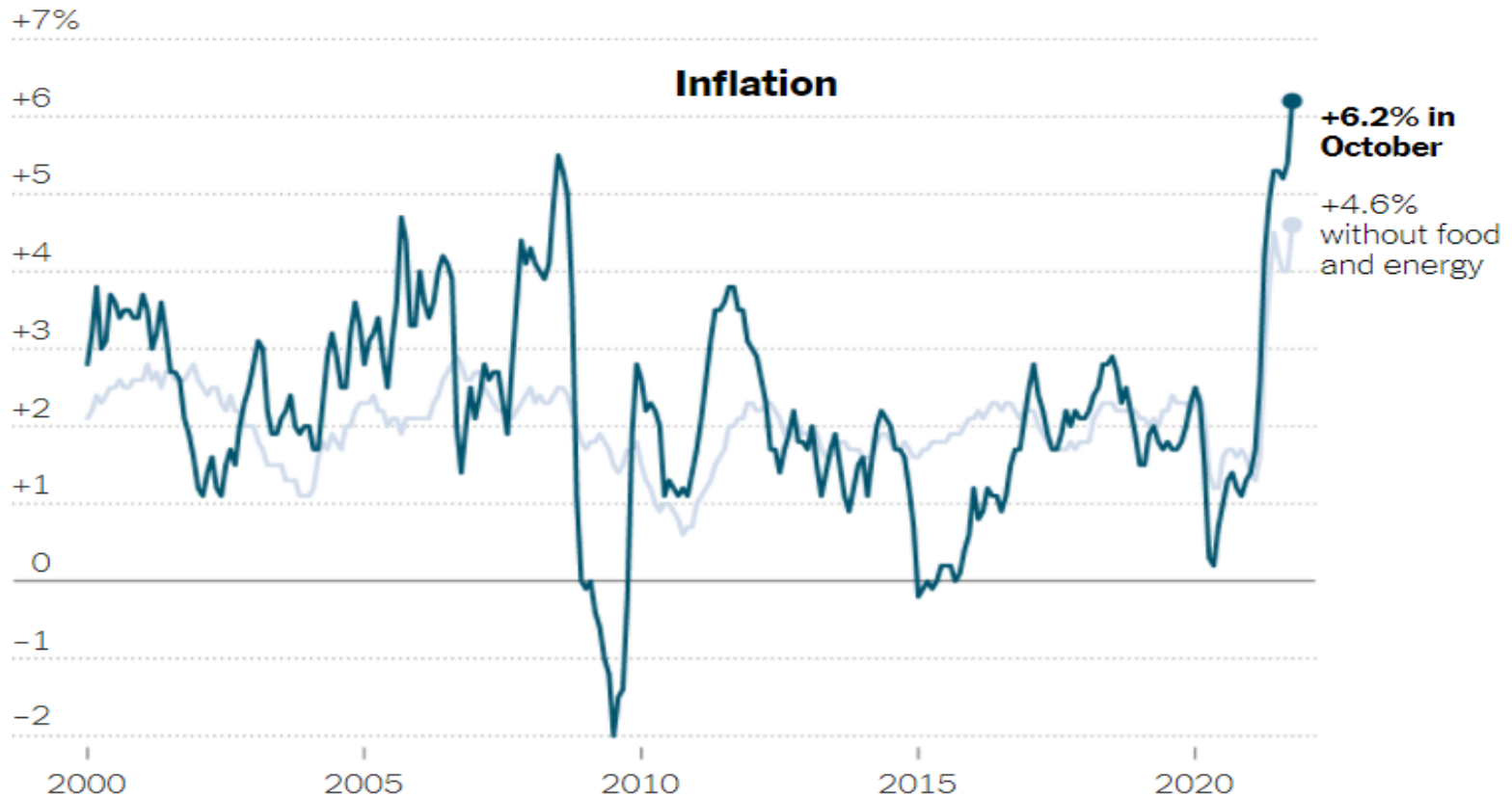
- Inflation
- Pandemic-related kinks
- Climate change

## Takeaways:

- Prices trending up
- Lead times going out
- Relationship with suppliers ever important
- No direct labor issues (yet)

# Inflation

Published Nov. 10, 2021 Updated Nov. 14, 2021



Year-over-year change in the Consumer Price Index • By The New York Times

# Inflation (cont'd)

## Commodity prices trend higher

### **High Steel Prices Have Manufacturers Scrounging for Supplies**

- Manufacturers are facing the highest steel and aluminum prices in years, another hurdle for U.S. companies already struggling to make enough cars, cans and other products.

### **Natural-Gas Prices fall from Peak as warm Autumn Buys Stockpiles**

- Shed 19% since hitting 13yr high, reversing some run-up of higher heating bills and higher manufacturing costs

### **Metal Prices Surge After Gas Crunch Crimps Output**

- Prices surged to multiyear highs after smelters, facing soaring energy bills and pressure to cut their carbon emissions, curtailed production.

Source: WSJ October 10 and 14, 2022

# Supply chain issues--examples

## **Transportation:**

### ***Biggest Kink in America's Supply Chain: Not Enough Truckers (NYT Nov. 9, 2021)***

- *Long hours and uncomfortable working conditions are leading to a shortage of truck drivers, which has compounded shipping delays in the United States.*
- *Ports of Los Angeles and Long Beach going to 24 hrs, but still lack truckers to move commodities and products*

Source NYT Nov. 9, 2021

## **Climate change:**

- *VELCO seed mix possibly doubling in price*
- *Extremely low inventory due to drought in Oregon's Willamette Valley where the majority of specific types of seeds are grown*
- *Lead times doubled*
- *Working with vendor on other options*

# Supply chain issues (cont'd)

## ***VELCO is seeing longer lead/response times***

- *fiber optic cable*
- *culverts, access materials*
- *steel poles*
- *control building components*
- *seed*

## ***Strategies include***

- *NATF/EEI collaboration (nascent)*
- *Moving up order dates*
- *Communicating price increases with regulators and owners*
- *Use of packagers that have strong supplier ties*
- *Advance ordering*
- *Monitoring commodities*

# VELCO commodities watchlist

*Pandemic-related and other supply chain kinks may impact project cost and time estimates*

- Steel
- Lumber
- Copper
- Aluminum
- Gasoline
- Diesel
- Propane
- Heating Oil #2
- Natural Gas

# Appendix- commodities

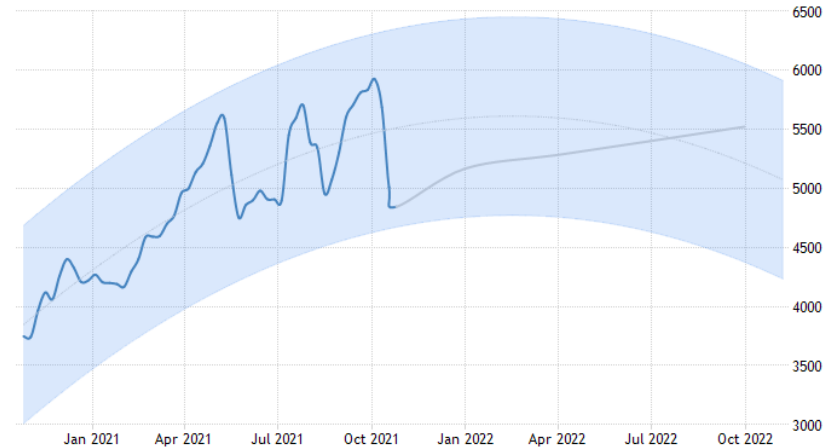


# Steel – slight decline from Sept - Oct

## Actuals



## Forecast



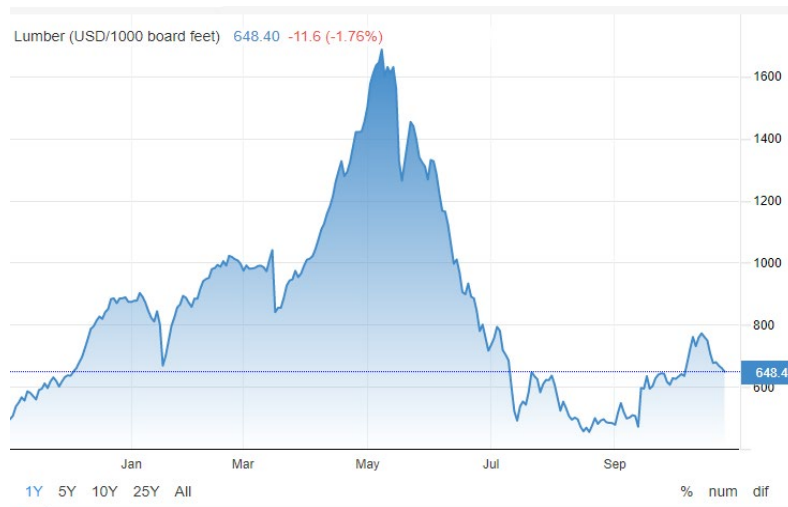
### Notes:

- Slight decline from Sept - Oct
- May 2021 all time high
- Price expected to decline late Q2 through end of 2021

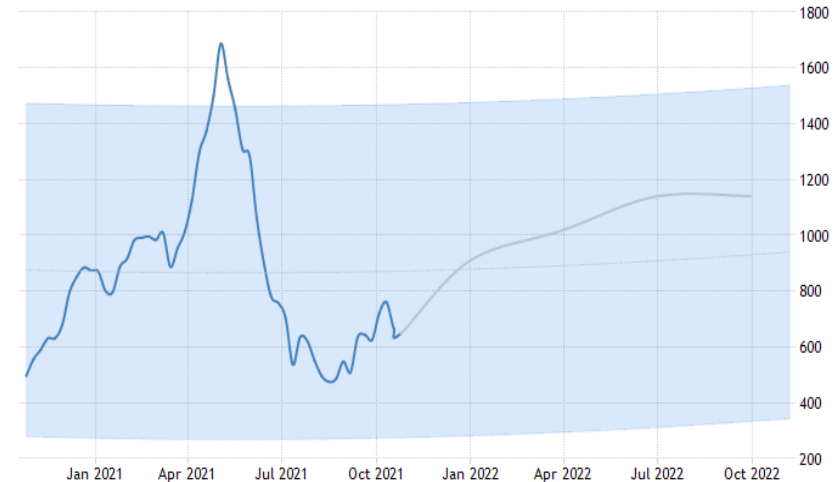
Source: Trading Economics

# Lumber- demand falling due to seasonal effect, however costs remain high

## Actuals



## Forecast



### Notes:

- Demand is falling due to seasonal effect, however costs remain well above pre-pandemic five year average
- Hurricane Ida has raised logistical demands (infrastructure damage & trucking)
- Tariff driven spikes and drops
- Builders and contractors advise start project Q4 2021 or Q1 2022

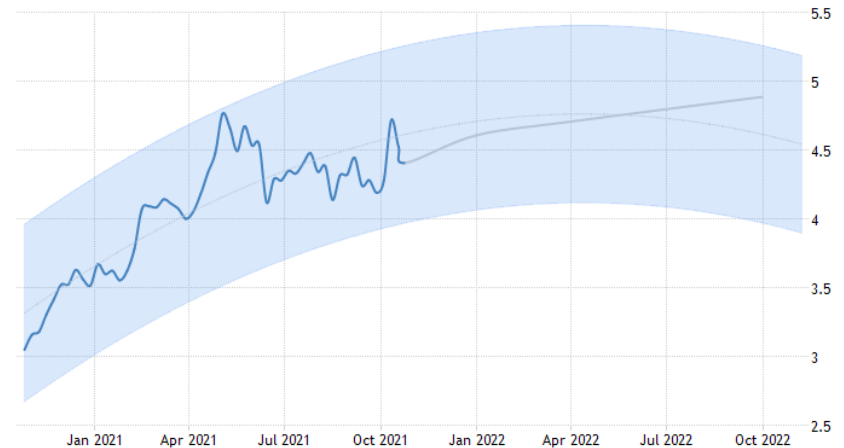
Source: Trading Economics

# Copper- steady upward trend

## Actuals



## Forecast



### Notes:

- Prices reached highest level in nearly a decade in May 2021
- Prices expected to slowly increase in 2021 and Q1 2022

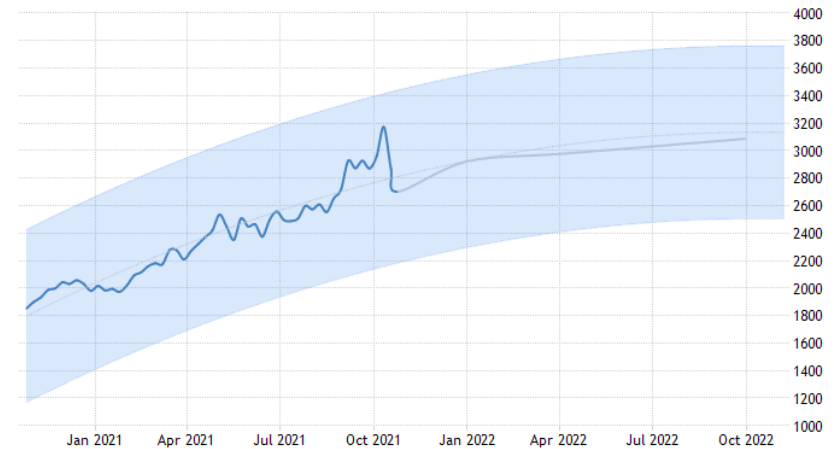
Source: Trading Economics

# Aluminum – steady upward trend

## Actuals



## Forecast



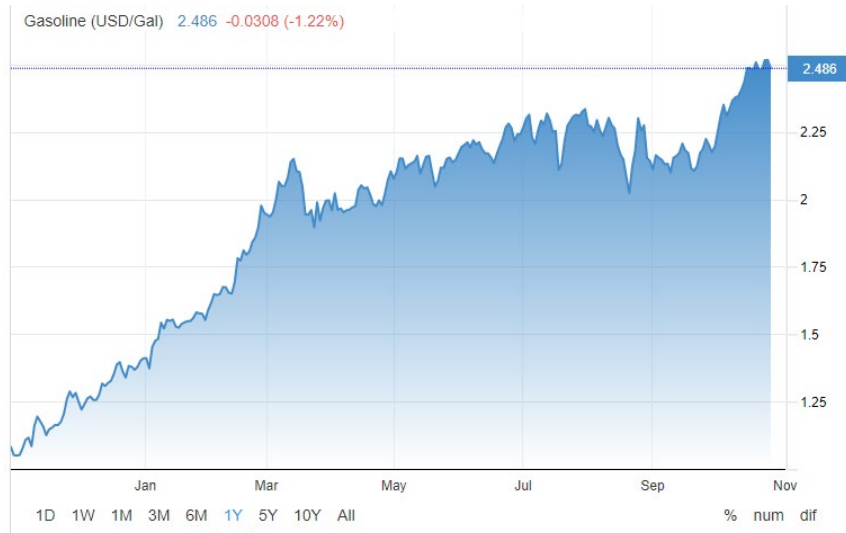
### Notes:

- Increased demand, coupled with rising freight costs, has boosted the aluminum price outlook.
- Record prices in US and Europe
- Decline in prices in late 2022

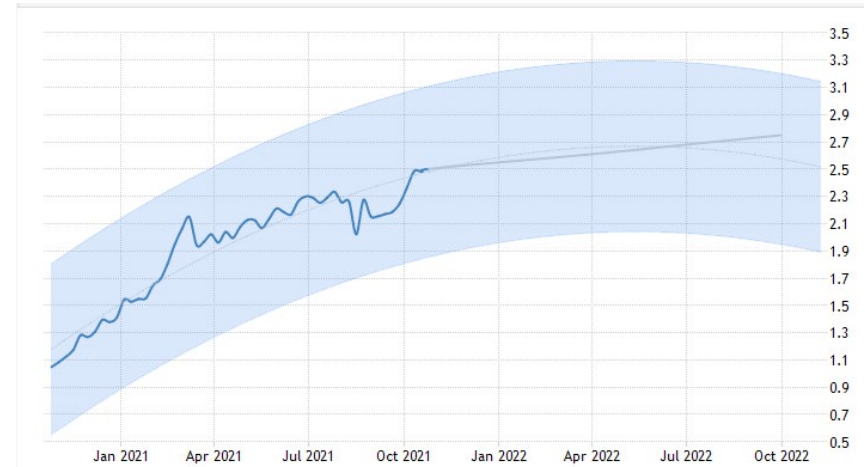
Source: Trading Economics

# Gasoline- Steady upward trend

## Actuals



## Forecast



### Notes:

- Mid-October, highest since September 2014
- Delta variant spread could hamper demand recovery
- Inventories unexpectedly increased

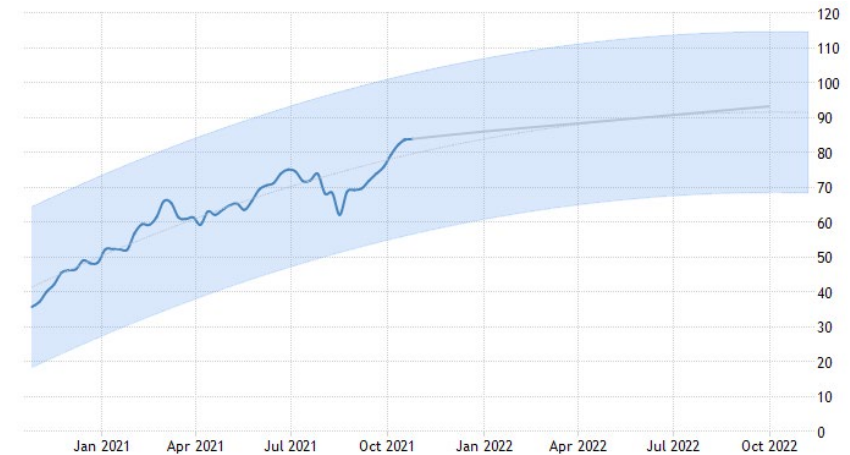
Source: Trading Economics; VT Agency of Transportation

# Diesel– post pandemic increases

## Actuals



## Forecast



### Notes:

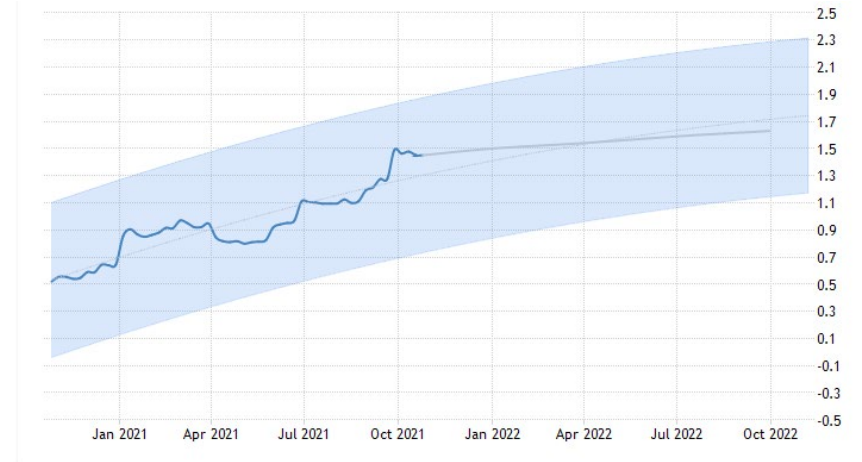
- Delta variant spread could hamper demand recovery
- Inventories unexpectedly increased

# Propane – trending upward

## Actuals



## Forecast



### Notes:

- Prices increasing **2021** Q3 –Q4

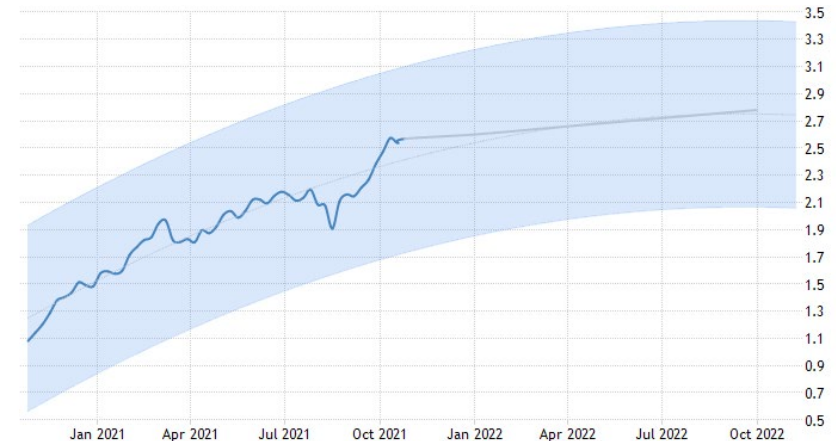
Source: Trading Economics

# Heating Oil #2 – trending upward

## Actuals



## Forecast



### Notes:

- Average barrel 2020 - \$42, 2021 - \$64, 2022 - \$63.00
- Avg \$2.77/gal in VT

Source: Trading Economics; EIA Vermont

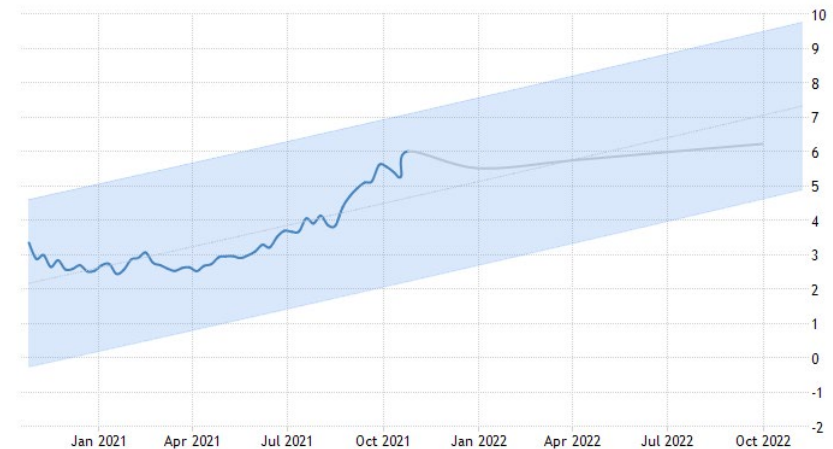


# Natural Gas - trending upward

## Actuals



## Forecast



### Notes:

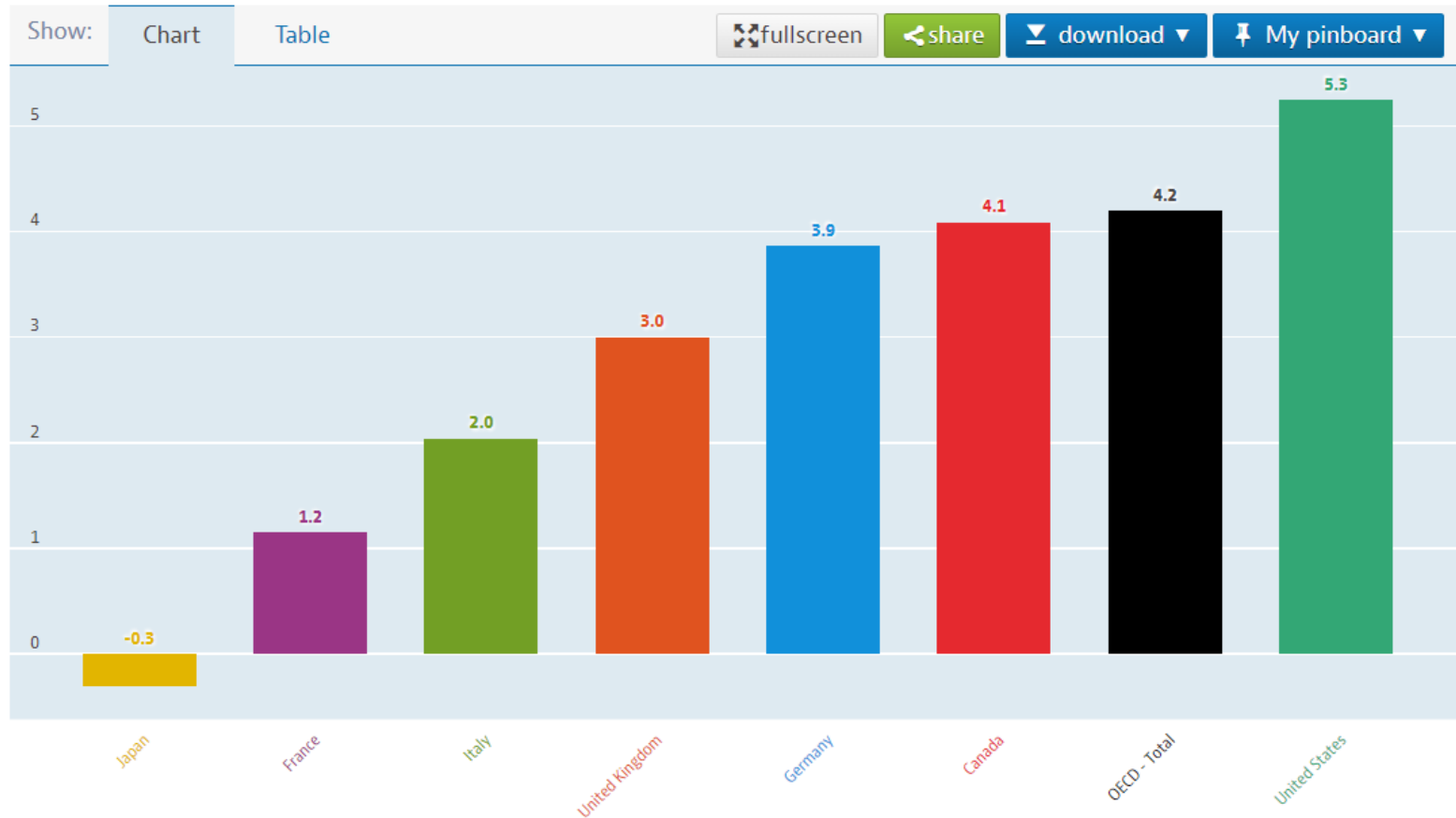
- 2021 – 2022 prices are expected to increase due to exports and domestic consumption

Source: Trading Economics; Energy Information Administration (EIA)

# Consumer Price Index (CPI) (9/17/21)

Inflation (CPI) Total, Annual growth rate (%), Aug 2021 or latest available

Source: Prices: Consumer prices

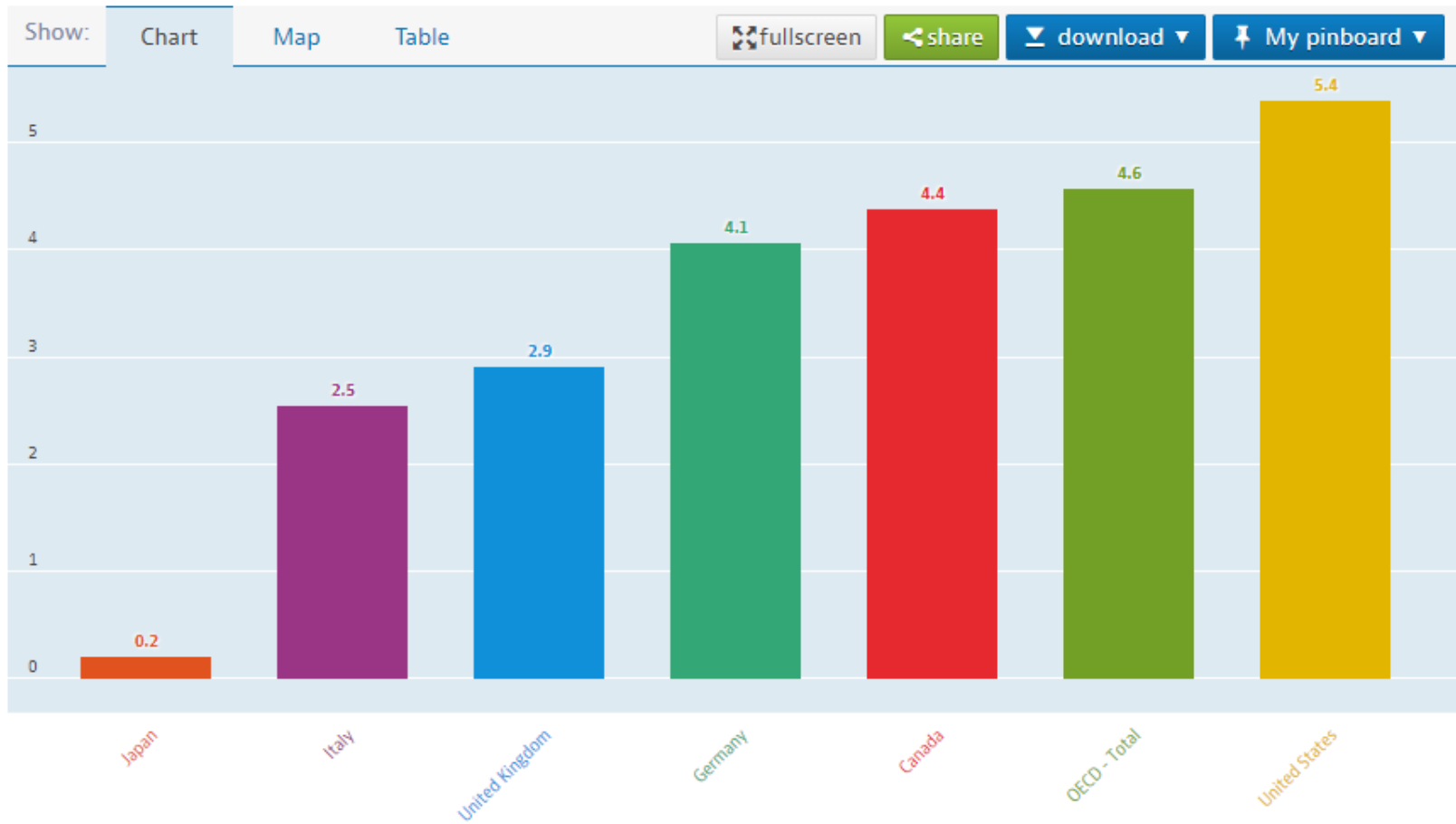


Source: <https://data.oecd.org/price/inflation-cpi.htm>

# CPI this time last year

Inflation (CPI) Total, Annual growth rate (%), Sep 2021

Source: Prices: Consumer prices



Source: <https://data.oecd.org/price/inflation-cpi.htm>