

POWER & COMMUNICATION CONTRACTORS ASSOCIATION



# 2022-2023 Economic Overview

Power & Communication Contractors Association (PCCA)

77<sup>th</sup> Annual Convention

Phoenix, AZ

Mark Bridgers - Continuum Capital

March 8, 2022

# Overall Economic Summary

- ▶ Economic recovery & expansion continues, unemployment continues to fall, labor participation slowly increasing, consumer confidence is recovering, Biden's infrastructure bill has passed, COVID variant threats are decreasing, things are starting to feel more normal...however...
- ▶ Significant risks exist:
  - Oil & Gas – Skyrocketing prices worsened by geopolitical pressures and growing supply chain disruptions
  - Geopolitical Unrest – Tensions surrounding Russia's invasion of Ukraine - How far will Putin go...how hard will the EU and US push on sanctions?
    - What game is being played and by whom? Texas Hold'em, Chicken, Chess?
  - Supply Chain Disruptions – Pandemic supply chain disruptions continue...they will unwind slowly and continue into 2023...possibly longer given geopolitical unrest.
  - Inflation – No longer an issue of the future...CPI hit a 40 year high of 7.5% for 2021 and projected to further increase...5-8% is painful but digestible...higher than this becomes highly problematic
  - Stock Market Volatility – January market correction of 10% reduction...is this the end of the correction or the beginning of a more severe correction?
  - Interest Rates & Recession – Rates will go up, how much, how fast, what implications...much more complicated calculus given supply chain & geopolitical mess

# Russian Invasion Status

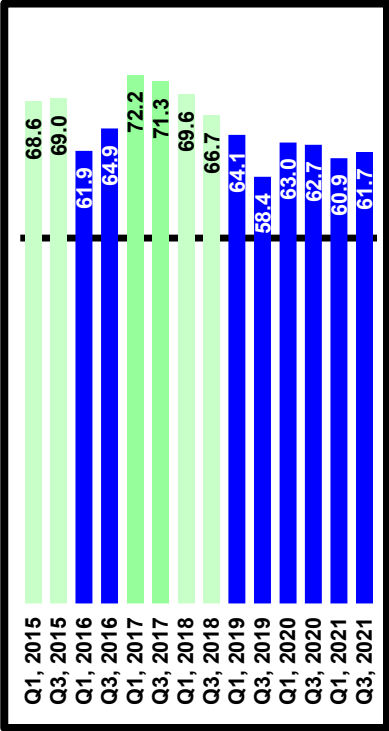
- ▶ Geography
  - 2<sup>nd</sup> largest land area country in Europe
  - Overrun by the Mongols in the 13<sup>th</sup> century; later controlled by the Ottoman Empire, Tsardom of Russia, Kingdom of Poland, and Austro-Hungarian Empire, until the land area was split between the Poles and the Russians in the 18<sup>th</sup> century; post the Russian Revolution in 1917, Ukraine was internationally recognized yet by 1922 was retaken as part of the Soviet Socialist Republic (USSR) until 1991 when it became independent with the collapse of the USSR.
  - Ukraine literally means “border lands”
- ▶ Population
  - 43 million
- ▶ Energy
  - Four nuclear power plants, 15 reactors, 50 percent of the power
  - Remainder is coal fired – minor amount of hydro



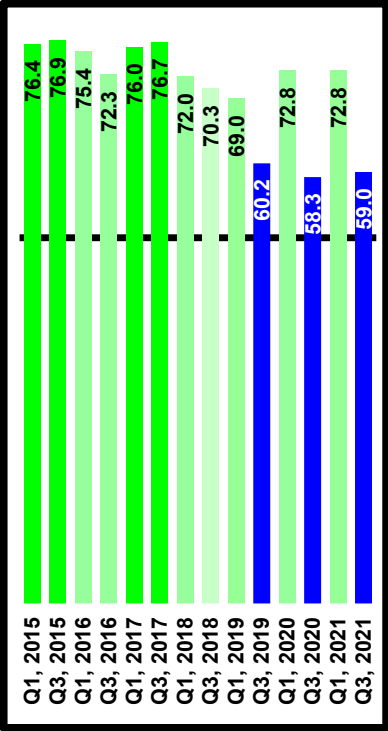
Source: World Nuclear Association; Global Coal Plant Tracker, Global Energy Monitor, February 2022; Institute for the Study of War with American Enterprise Institute’s Critical Threats Project (Russian-occupied areas) | Note: Occupied areas are as of 3 p.m. Eastern on March 4. The New York Times;

# Utility Industry Perceptions

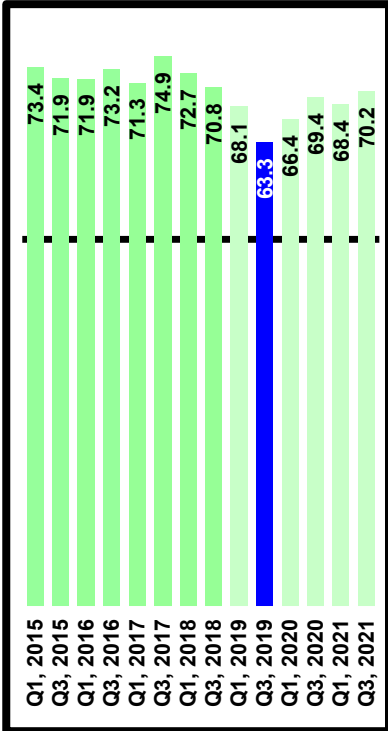
All Contractors



Telecom



Electric Dist.



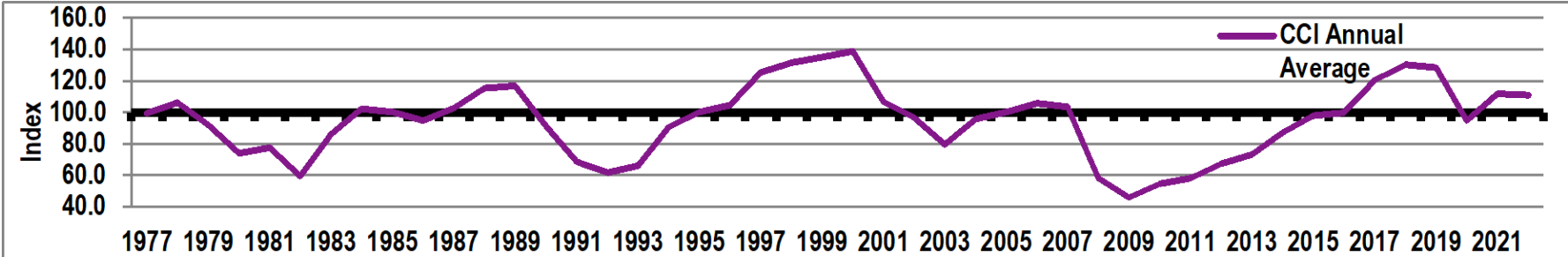
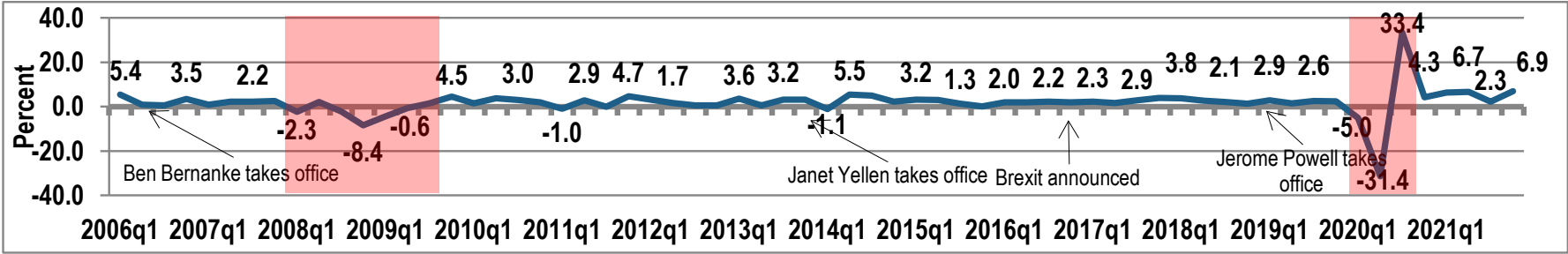
**Utility Construction Index**  
 > 50 Indicates Growth (Better)  
 < 50 Indicates Slowing (Worse)

Interpretation: A reduction from 72.2 (1<sup>st</sup> Q 2017) down to 58.4 (3<sup>rd</sup> Q 2019) for All Utility Contractors indicates that while perceptions of the market are still positive, they are less positive than they were prior to 2017.

Source: Proprietary Continuum analysis of utility contractor perceptions over 2015-2021.

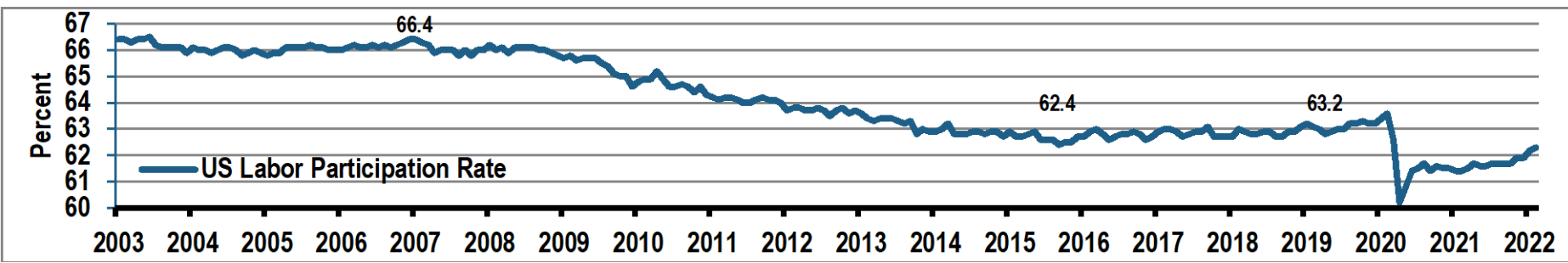
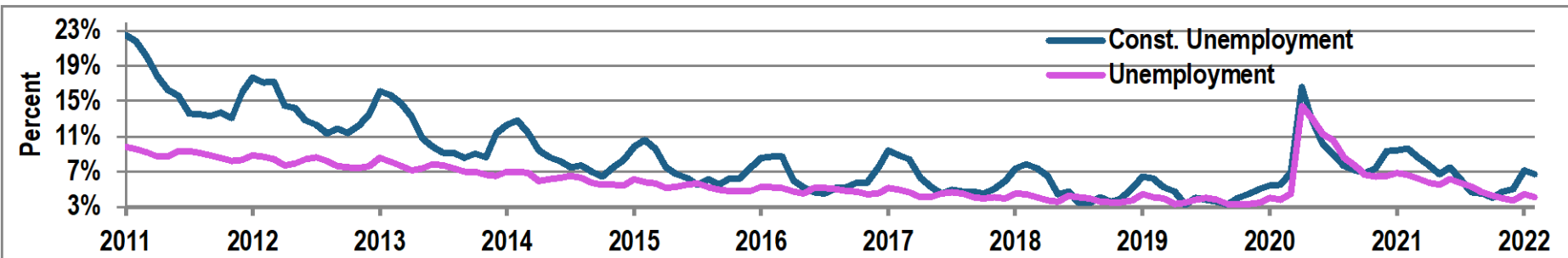
# Gross Domestic Product (GDP)

- ▶ 2021 4<sup>th</sup> Q 6.9%; 2020 4<sup>th</sup> Q 4.3%
  - Sizzling growth from 2021 will continue into beginning of 2022 as the economy rebounding from the coronavirus recession
  - One trade off is the inflation we are experiencing – the Federal Reserve will raise interest rates to attempt to slow growth and bring inflation down
- ▶ Consumer confidence has begun to increase again in recent months, will continue to increase as employment recovers...geopolitical will pull down



# Unemployment

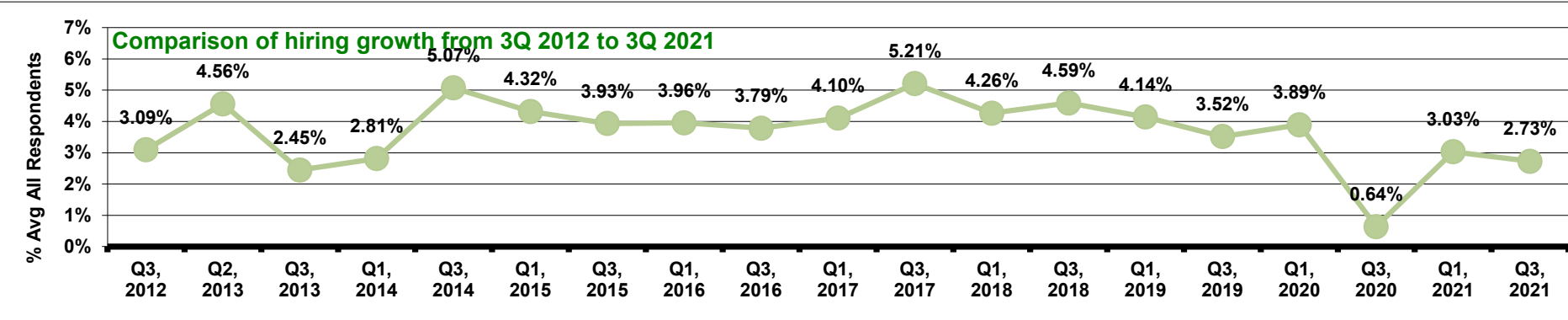
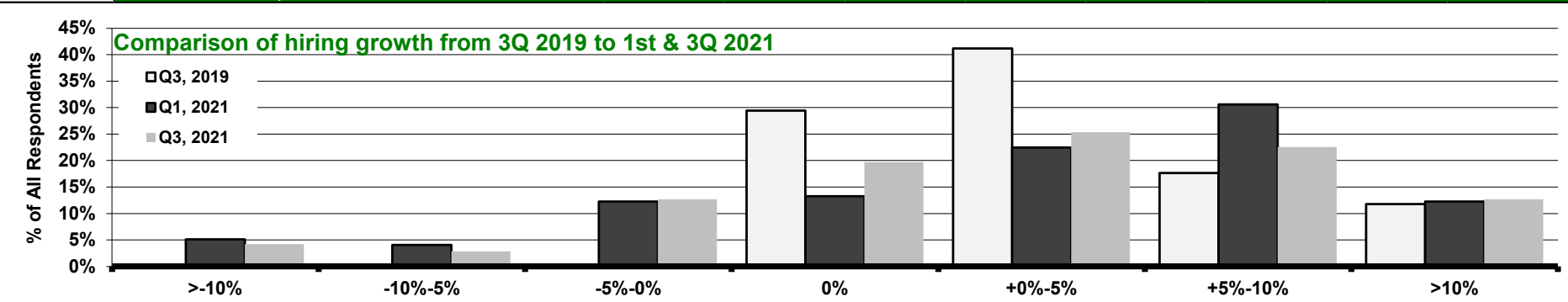
- ▶ Overall unemployment falling steadily - at 3.9%, the lowest unemployment rate since February 2020 – February 22 added 678,000 jobs...however...
- ▶ Labor Participation has still not reached pre-pandemic levels - **38% of working age Americans are not working – 81 million people!**
  - "Great Resignation" driven by search for better pay, flexibility & benefits post-pandemic
  - Every point is 2.1 million people put back to work or approximately 8.4 million people needed just to get back to 2007 workforce participation levels



# Utility Hiring Perspectives

- ▶ Overhead and underground utility survey 2012-2021
  - Hiring growth remained steady before COVID-19 and has returned to a rate that exceeds the natural growth rate of the workforce – from where will additions come?

**Exhibit x** What changes do you foresee in the number of fulltime direct employees in your organization for 2021? (excluding natural attrition, retirements, etc.)



Source: Proprietary Continuum analysis of utility contractor survey feedback during 2012-2021.

# Finance & Banking

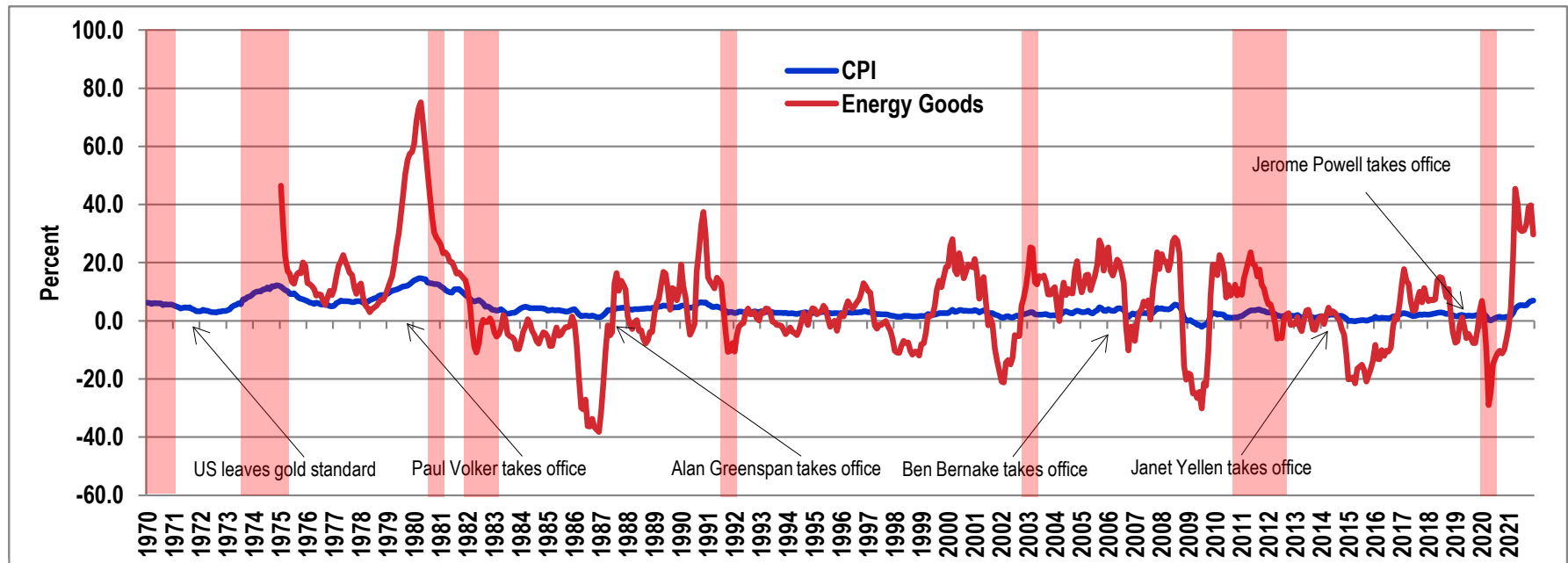
- ▶ Fed rates at 0.15% as of January 2022, three to five interest rate hikes anticipated in 2022 beginning in March
  - Rates likely to rise 1.0% to 1.5% during 2022 in an attempt to slow economic growth & inflation
  - How will geopolitical calculus factor in...slower increases? smaller increases? no effect?
- ▶ Consumer debt remains a massive problem...lower interest rates make it slightly more manageable to service the interest but driving down the principal is necessary...higher rates make it unsustainable
  - Mortgage interest rates still at historic lows...how high will they go?
- ▶ Is Federal Debt an even larger problem?
  - Are we moving toward an environment where the Federal Government distorts the credit markets with use, selling and buying of debt instruments?
    - Federal Deficit – annual difference between federal revenue and spending – selling of treasury notes and bonds is used to finance this deficit
    - Federal Debt (The piece that is visible) – surpassed \$30 trillion in January 2022 for the first time in history, due to accelerated government borrowing during COVID
    - Interagency Borrowing (Visible but hard to see) – Borrowing from social security fund for today spending on something else and balanced with an IOU as an example – seems free but has to eventually be repaid to met obligations
    - Promises to Pay (Nearly invisible and estimate the size) – Social Security, Government pension, and programs that promise to pay at some point in the future – partially unfunded

Source: Board of Governors Federal Reserve System, Press Release, January 2022; Reuters, U.S. Markets, Fed Signals Rate Hikes in 2022 as Inflation Fight Begins, December 2021;



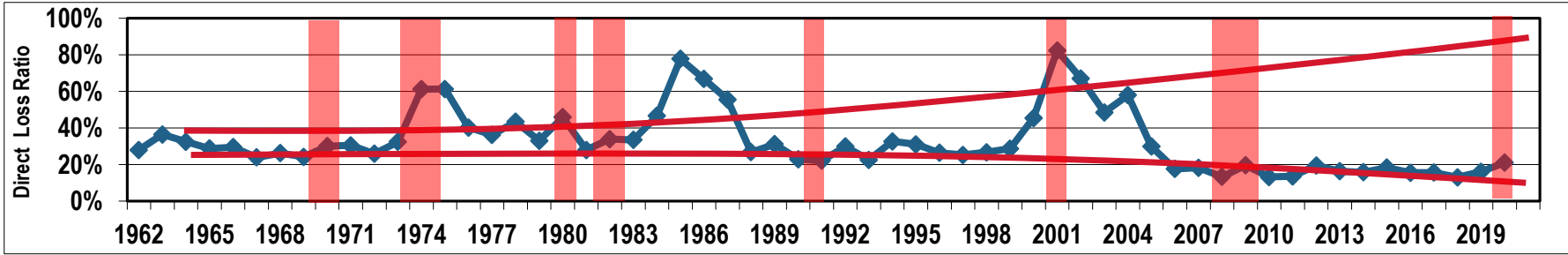
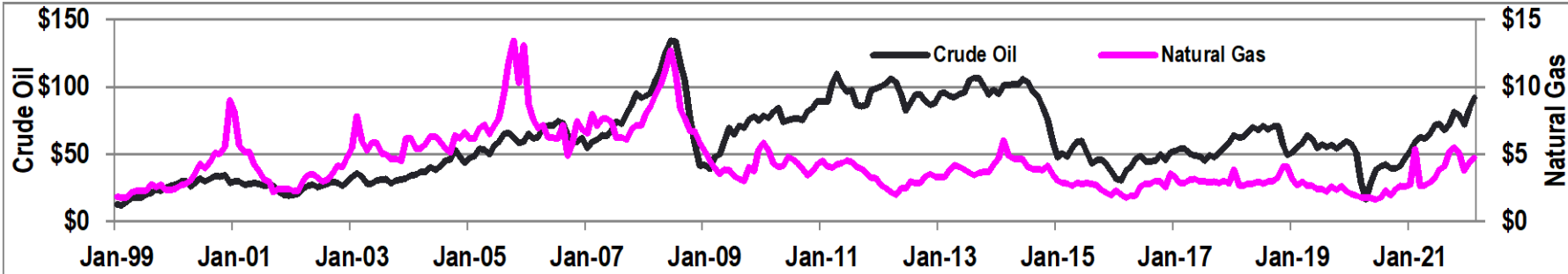
# Inflation *(1 of 2)*

- ▶ Has spiked to a rate of 7+% in 2022, highest in nearly 40 years...2021 annual rate 5+%...2022 will meet or exceed this level.
  - PPI is accelerating beyond CPI and exceeds 9% currently
- ▶ An inflation, upward spiral has begun and it may take a significant recession to bring it to a halt!



# Inflation *(2 of 2)*

- ▶ Oil & Natural Gas significantly exceeding pre-pandemic levels approaching \$120+ and \$5+
- ▶ Gasoline & Diesel spiking into 2022 – gas potential to reach \$7 a gallon in CA
- ▶ What can the past inflation and energy price peaks teach us?
  - 1970’s recession contractor bankruptcy impacts – Fixed priced contracts a challenge
  - 1980’s recession contractor bankruptcy impacts – Fixed priced contracts a challenge



# Infrastructure Investment & Jobs Act (IIJA)

- ▶ In November 2021, Biden signed the Infrastructure Investment & Jobs Act into law
  - Allocates \$1.2 trillion in total spending, with \$550 billion in investments over 5 years to prepare infrastructure for the impacts of climate change, cyber attacks, and extreme weather events
    - **\$7.5 billion for EV charging stations**, \$65 billion for broadband expansion, \$6.2 billion to prepare infrastructure for extreme weather, \$343 billion for roads/bridges/safety, \$109 billion for new transit systems, \$168 billion for wastewater and clean water, \$1 billion for telecom, etc.
  - Aims to build clean transportation, water, and universal broadband infrastructure & improve and expand existing infrastructure, including upgrading the power grid by building new transmission lines designed for renewable energy
  - The Department of Transportation & Department of Energy released the National Electric Vehicle Infrastructure (NEVI) formula program in February 2022, which will allocate \$4.6 billion in grants to states for EV charging infrastructure, with \$660 available in 2022 and \$1 billion in 2023-2026

Source: National Law Review, Key Energy Provisions in Biden Admin \$1.2 Trillion Infrastructure Investment Act, February 2022; DOT, “National Electric Vehicle Infrastructure Formula Program”, February 2022.

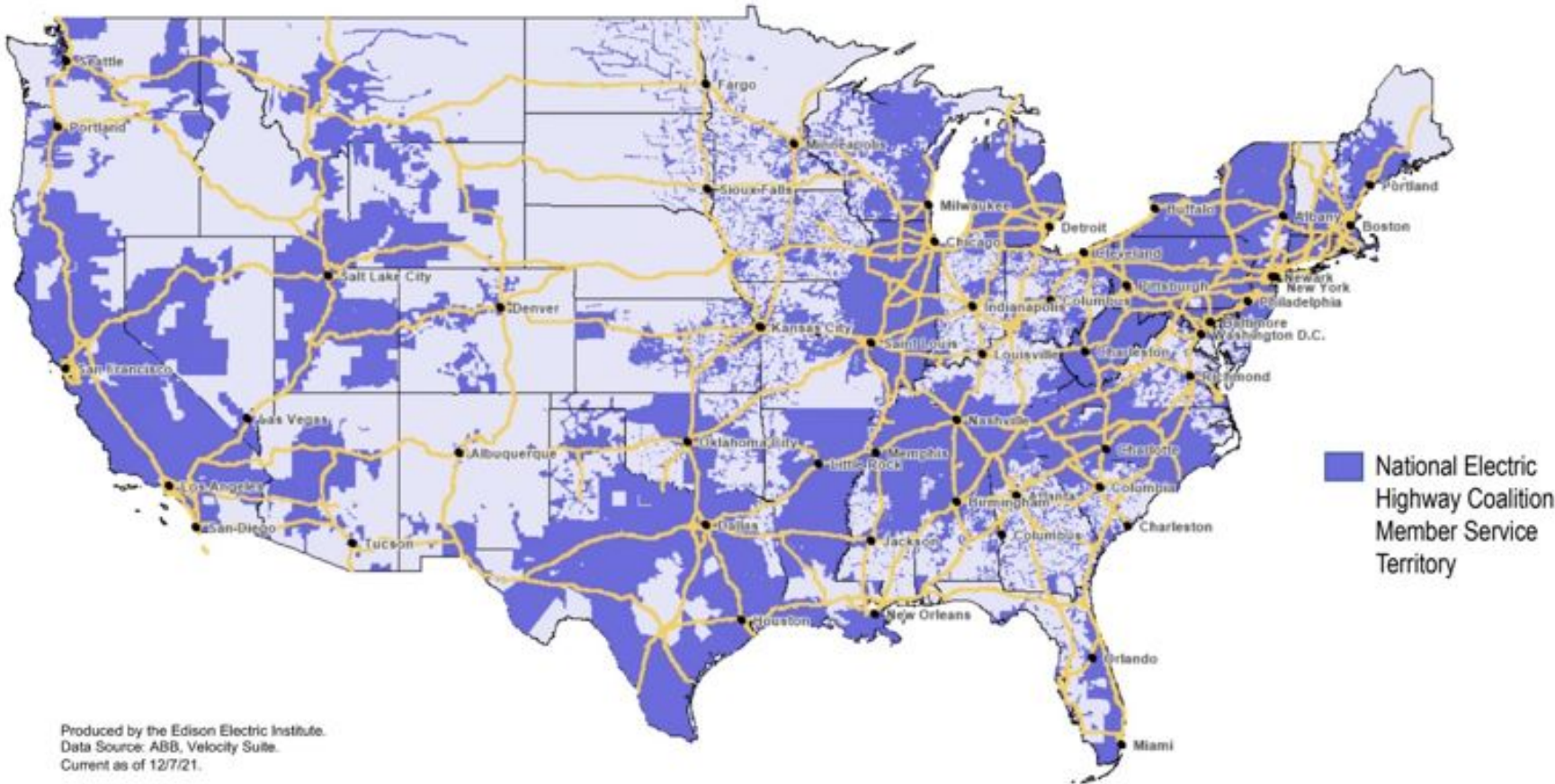
# Electric Vehicle Infrastructure *(1 of 2)*

- ▶ IIJA assigns \$7.5 billion to build out a network of EV chargers in the U.S.
- ▶ The number of EV's operating on U.S. roads is projected to be 22 million by 2030
  - This will require roughly 100,000 charging ports to support, with annual sales of electric vehicles projected to reach \$3.5 million
  - General Motors will offer 30 all-electric models globally and 40% of its U.S. models will be battery electric vehicles by the end of 2025
  - Ford is investing \$22 billion in vehicle electrification through 2025, with the F-150 Lightning set to arrive in spring of 2022 and the all-electric Mustang Mach-E available for purchase since early 2021
- ▶ EEI established National Electric Highway Coalition in December 2021
  - Consists of 51 investor-owned electric companies committed to provide EV charging ports across major highways by end of 2023

Source: White House, Fact Sheet: The Bipartisan Infrastructure Deal, November 2021; National Law Review, Key Energy Provisions in Biden Admin \$1.2 Trillion Infrastructure Investment Act, February 2022; EEI, Electric Power Industry Outlook, February 2021.

# Electric Vehicle Infrastructure (2 of 2)

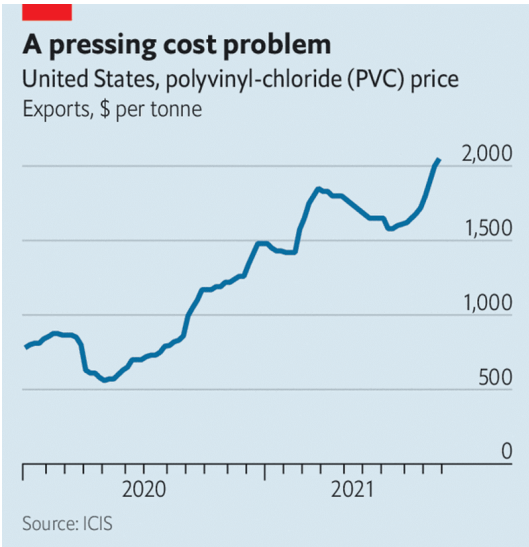
## The National Electric Highway Coalition Will Support EV Charging Along Major U.S. Travel Corridors



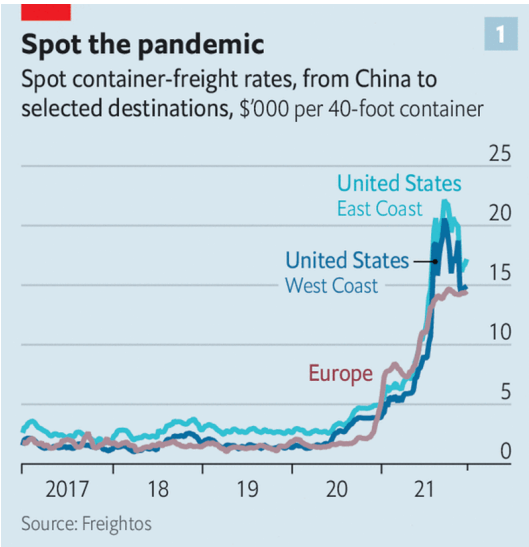
Source: EEI, National Electric Highway Coalition, December 2021.

# Supply Chain Challenges & Opportunities (1 of 3)

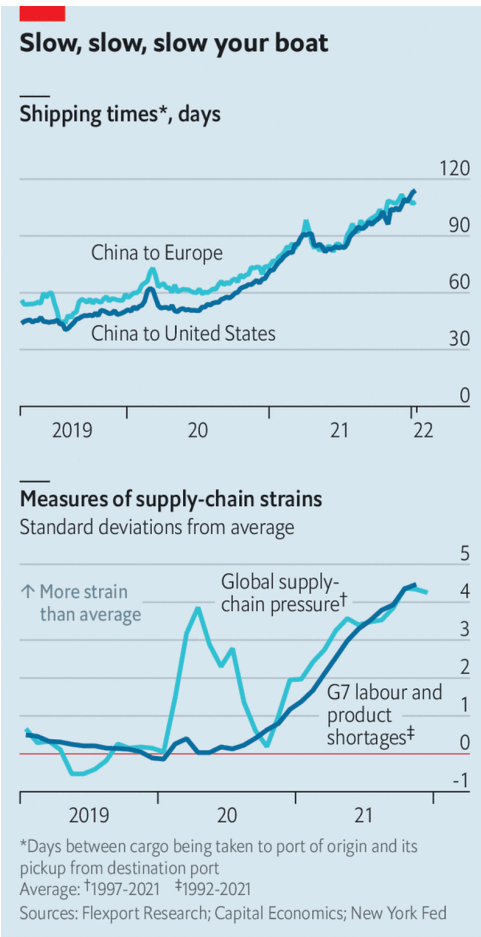
- ▶ Price spikes on raw materials... **4x in 12-15 months**
- ▶ ...Price spikes on transportation... **4x in 12-15 months**
- ▶ ...Slowdown in transportation speed... **60-90 days added**
- ▶ In combination all yield massive and unprecedented supply chain disruption



Source: The Economist



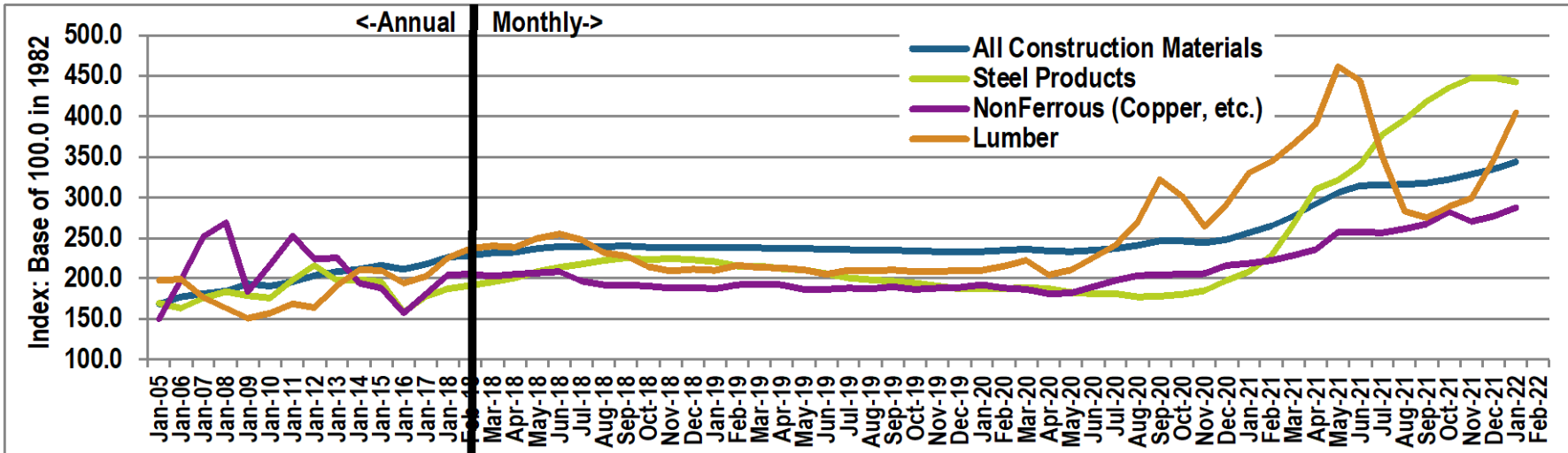
The Economist



The Economist

# Supply Chain Challenges & Opportunities (2 of 3)

- ▶ What is your “World View”
  - “Old is New Again” – A scenario where the stability, forecastability, and globalization have come to an end, and we have to revert to traditional (pre-1980’s) inventory sourcing and management philosophy that is not entirely dependent on just-in-time techniques.
  - “Rebound to Normal” - A scenario where we are experiencing a bump entirely due to COVID-19 challenges and once it is in the rear-view mirror we can get back to normal.
- ▶ Construction material pricing is very market and source material driven in this current cycle



Source: Continuum analysis and presentation of US Department of Commerce raw data.

# Supply Chain Challenges & Opportunities *(3 of 3)*

## “Old is New Again”

- ▶ Lead time management?
- ▶ Price certainty?
- ▶ Availability certainty?
- ▶ US manufactured vs imported?
- ▶ US assembled vs imported?
- ▶ Alternative/new manufacturer?
- ▶ Inventory management philosophy?

## “Rebound to Normal”

- ▶ Lead time management?
- ▶ Price certainty?
- ▶ Availability certainty?
- ▶ US manufactured vs imported?
- ▶ US assembled vs imported?
- ▶ Alternative/new manufacturer?
- ▶ Inventory management philosophy?

**Collaborate to Mitigate Risk**



# Thank You

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# Mark Bridgers

Mark founded and leads a Utility Vertical Market team team at Continuum Capital. He works with gas/electric utilities, power generators, pipeline companies, and energy companies. As a recognized expert in capital construction and operational challenges, Mark was recently honored with membership in the Society of Gas Operators (SOGO) and the Gild of Ancient Suppliers.

Mark helps firms prepare for and successfully navigate “strategic transitions.” His passion is helping organizations achieve breakthrough innovations through collaborative or integrated relationships. He is the architect of an approach for integrated service provider management referred to as the “Extended Enterprise” among construction industry participants.

Mark is an avid educator, trainer, and writer with more than 20 years of industry expertise including financial performance analysis; development and implementation of tools to reduce construction cost, life-cycle cost, and operational friction; restructuring of processes and procedures - often times using LEAN Construction techniques; and leader development.. He is a recognized expert in capital construction and operational challenges . Mark is also author of over 150 articles and research papers published internationally in industry journals, including ENR, PE – The Magazine for Professional Engineers, Pipeline & Gas Journal, Utility Contractor (NUCA), Underground Contractor, Electric Energy (RMEL) and Electric Perspectives (EEI).

Mark holds a master’s degree in business administration from the University of Virginia’s Darden school of Business and a bachelor’s degree in financial management from Clemson University. In addition, he earned the designation of Chartered Property and Casualty Underwriter (CPCU) and Associate in Reinsurance (ARe).



# About Continuum

Continuum Capital is a boutique management consulting, training, investment banking, and capital services firm providing services to the worldwide construction industry. We provide services in the areas of strategic market information, acquisition integration, ownership transition, private equity financing, project delivery improvement, management and field-level training, strategic planning, strategic sourcing, and productivity improvement.

<b><i>Mission Statement</i></b>	Transform capital asset construction worldwide.
<b><i>Founded</i></b>	2011
<b><i>Office Locations</i></b>	Raleigh, NC; Birmingham, AL; Denver, CO; Dallas, TX; Chicago, IL; Baltimore, MD
<b><i>Number of Employees</i></b>	9
<b><i>Geographic Market</i></b>	United States, Canada, Latin America, Europe, and Pacific Rim
<b><i>Continuum Capital's Clients</i></b>	Contractors; engineers; architects; government agencies; utility companies; manufacturers and distributors of construction materials and construction equipment
<b><i>Consulting Clients</i></b>	15 per year (90% of whom are repeat customers)
<b><i>International Speaking Locations</i></b>	Brazil, Canada, France, Mexico, South Korea, United Arab Emirates
<b><i>Professional Lecture &amp; Speaking</i></b>	20 per year
<b><i>Knowledge &amp; Database Access</i></b>	Proprietary database tools for benefit of clients: <ul style="list-style-type: none"> <li>a) Utility construction index from 2009 to present;</li> <li>b) Utility construction field productivity improvement techniques from 1700 surveys;</li> <li>c) Utility contractor financial performance comparison of 50+ publicly traded and privately held firms;</li> <li>d) National and regional utility construction spending history and forecast</li> <li>e) Gas utility "Best Practice" database and knowledge defining superior performance from 2000 to present</li> <li>d) 35,000 contact database to support acquisition, research, and industry knowledge</li> </ul>
<b><i>Corporate Web Site</i></b>	<a href="http://www.ContinuumCapital.net">www.ContinuumCapital.net</a>
<b><i>Energy &amp; Utility Team Leader</i></b>	Mark Bridgers – President & Founder Continuum Capital; Director Utility Vertical Market

# About Continuum

Founded in 2011, Continuum Capital provides boutique management consulting, capital services, and training, to the energy, utility, pipeline, and industrial markets supporting the successful and efficient planning, design, construction, and operations of capital asset.

Continuum utilizes a proprietary “SMART Advisory” methodology to deliver innovative and customized solutions to energy, utility, or pipeline owners/operators who want to transform their capital asset construction processes. Service providers to these firms, including underground and overhead contractors and engineers, are integrated into the transformation process, frequently forming what Continuum refers to as an “Extended Enterprise.”

Continuum’s experienced consultants can assist your business with Capital Construction/O&M Unit Effectiveness, Program Management Office Transformation, Risk Management/Mitigation for Capital Asset Construction, Project Management/Controls Installation, Process Analysis & Improvement, Management of RFI / RFQ / RFP / Procurement, Extended Enterprise/Alliance Formation, and Field Productivity Assessment & Improvement.

Additional and specialized services include, M&A or Due Diligence Support, Market Strategy, Market Research, Cost Analysis & Savings, Cost to Complete Analysis, Cost to Convert to Best Purpose, and Cost to Restore Asset.

Let Continuum transform your business!

**S** – Strategic Relations

**M** – Measureable Objectives

**A** – Aligned Sourcing

**R** – Risk Controlled

**T** – Technology Enabled

