

# ACC NEWS



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### **YOUR WEEKLY UPDATES**

Week 23 of 2021



Healthcare



**Ports** 



Shipping



Rail



Supply Chain



Beverages



Retail



C-Stores



Road



Handling



# In this week's update

- → Slide 3 US Energy Consumption Dropped 7.3 Quads in 2020
- → Slide 4 Labor Shortage is the Next Major for Supply Chain
- → Slide 5 Definition botnet
- → Slide 6 Retail Update
- → Slide 13 Supply Chain Update
- → Slide 21 Shipping Update
- → Slide 27 Beverages, CBD & C-Stores
- → Slide 28 Healthcare Update
- → Slide 31 Cybersecurity Update
- → Slide 32 Alternate Energy Update
- → Slide 34 How Rising Treasury Yields Impact Portfolios
- → Slide 35 The Economics of Coffee
- → Slide 36 Corn: In a Bushell

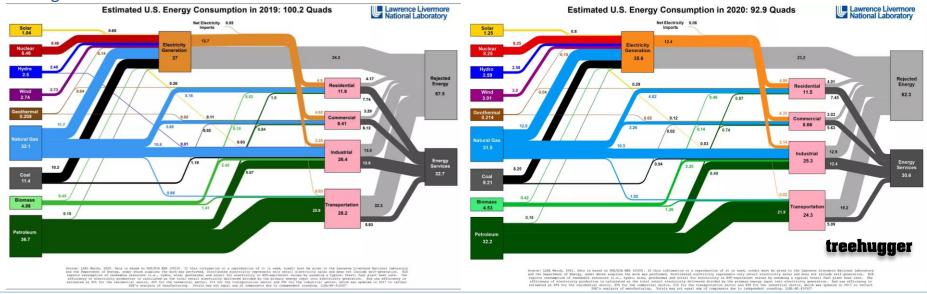




### **US Energy Consumption Dropped 7.3 Quads in 2020**

- The single most important number here is the total estimated energy consumption of 92.9 quads. A quad is a quadrillion BTUs (1015) and is equivalent to the energy in 8,007,000,000 gallons of gasoline—it's big. In 2019 the total consumption was 100.2 quads, so the reduction in energy consumption was pretty much exactly what we have to do every year between now and 2030, a pandemic's worth of energy savings every year. That sounds somewhere between daunting and impossible, but if you study the chart, there are a lot of ideas about where our priorities should be.
- The first thing that grabs attention every year is how much of this energy consumption is "rejected energy." That's what is wasted as heat going up the chimney or out the exhaust pipe; they assume 65% efficiency in electricity generation and only 20% in transportation. Most of that orange electricity is going into residential and commercial buildings, and these days, that's mostly cooling.

• Looking back to 2014, you can see how far we have come. Solar and wind have grown tremendously, Coal is down by almost half, and overall consumption in 2019 had not grown that much in five years. Some things are going in the right direction.







### Labor Shortage is the Next Major Issue Facing the Supply Chain

- The labor shortage is fast becoming the next significant problem for the supply chain. Many frontline warehouse employees fall into the category of shift workers who have yet to return to the workforce, even as the economy bounces back, and the demand for workers continues to climb. While these critical jobs remain difficult to fill, employers are focusing on optimizing the labor force they have and introducing incentives and employee recognition programs to keep the team they do have engaged and happy.
- A particularly painful category of workers that's in short-supply and high demand is supply-chain planners. Now, in addition to having to manage the current logistics issues and shortages, employers are having to figure out how to fill the position that would have traditionally helped alleviate some of these bottlenecks or re-allocate duties to current employees who are likely already overworked. With job openings close to a 20-year high, supply chains are struggling to keep up with a new boom in consumer demand.
- The labor shortage within the supply chain will ultimately end up costing manufacturers and the end customer more money as distribution teams continue to be backlogged and understaffed. While manufacturers and suppliers work to hire and train as quickly as possible, many are utilizing supply chain visibility tools to alleviate the strain of labor shortages within operations. With much of the strain falling on frontline employees, real-time warehouse visibility is more important than ever.
- Several companies, from fast food chains like Chipotle Mexican Grill, Inc. to chicken producer Pilgrim's Pride Corp., and MGM Resorts International say they can't find or even attract enough workers. In addition to the hospitality and warehousing industry suffering labor shortages, the automotive industry is also experiencing their own shortages due to reduced demand due to the chip crisis. Short-term shutdowns to sanitize facilities combined with difficulties hiring workers continues to cause strain and slow down growth for manufacturing. Because of this, many companies are now turning to labor management visibility for a better understanding of how to utilize their existing workforce more efficiently.
- When short-staffed, it's imperative to make smart decisions about the different tasks and activities being allocated to each employee inside the warehouse. Incorporating a visibility tool focused on labor management allows employers to see how the workforce is performing at any level defined in real-time. Global Trade

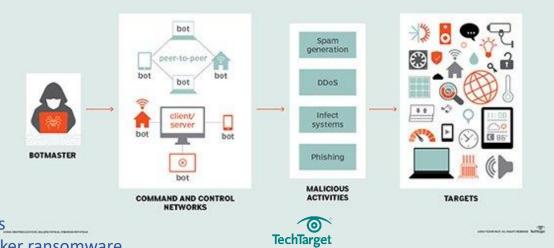




### **Definition - botnet**

- A botnet is a collection of internet-connected devices, which may include personal computers (PCs), servers, mobile devices and internet of things (IoT) devices, that are infected and controlled by a common type of malware, often unbeknownst to their owner.
- Infected devices are controlled remotely by threat actors, often cybercriminals, and are used for specific functions, yet the malicious operations stay hidden from the user.
- Botnets are commonly used to send spam emails, engage in click fraud campaigns and generate malicious traffic for distributed denial-of-service (DDoS) attacks.
- The term botnet is derived from the words, robot and network. A bot, in this case, is a device infected by malicious code, which then becomes part of a network, or net, of infected machines all controlled by a single attacker or attack group. A bot is sometimes called a zombie, and a botnet is sometimes referred to as a zombie army. Conversely, those controlling the botnet are sometimes referred to as bot herders.
- The botnet malware typically looks for devices with vulnerable endpoints across the internet, rather than targeting specific individuals, companies or industries.
- The objective for creating a botnet is to infect as many connected devices as possible and to use the large-scale computing power and functionality of those devices for automated tasks that generally remain hidden to the users of the devices.
- The Zeus malware, first detected in 2007, is one of the best-known and widely used malware types in the history of information security. Zeus uses a Trojan horse program to infect vulnerable devices. Variants of this malware have been used for various purposes over the years, including to spread CryptoLocker ransomware.

#### **Botnet command and control architecture**







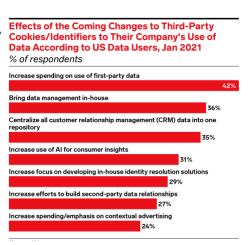
#### Big Lots crushes estimates amid strong sales; opening 50 to 60 stores CSA

- CEO Bruce Thorn said the retailer expects to open from 50 to 60 stores in 2021 while also closing some underperforming locations, for a new store increase of 21.
- "Our outstanding results for the quarter were achieved despite significant supply chain and freight headwinds, which we expect to continue through the balance of the year," stated Bruce Thorn. "Meanwhile, we are taking other important steps to strengthen our business. These include rolling out our forward distribution center strategy to relieve pressure at our regional distribution centers and more efficiently process bulk items such as furniture."

#### 



- While 2020 was an unprecedented curveball for many brands and retailers—especially those dependent on brick and mortar—the second half of 2021 looks like it will be a period of critical evaluation of their marketing tech stack amid a shifting privacy environment and the impeding deprecation of third-party cookies.
- Brands are reinvesting in initiatives that allow them to own and strengthen their advertising efforts and direct relationships with customers through owned channels.
- Often, this means doubling down on first-party data. According to a study from the Interactive Advertising Bureau (IAB), 42% of US data users said the coming changes to third-party cookies and identifiers will increase their spending on use of first-party data.



#### TSMC Construction of Arizona Chip Plant Is 'Well Underway' SupplyChainBrain

- TSMC said it's moving forward with plans to build a \$12 billion chip plant in Phoenix, a step toward addressing U.S. concerns over reliability and security in the tech supply chain.
- Phoenix approved financial incentives and government support for the project in November and agreed to provide about \$200 million to develop roads, sewers and other infrastructure, according to a notice from the city council. Wei also reiterated a previously announced plan to mass produce advanced 5-nanometer chips by 2024 in the state.





#### **US ECONOMY:** Coronavirus Predictive Indicators for Economic Impact

prevedere

All Categories: Look at these indicators to understand how they are placing upward or downward pressure on the economy.

Last Refresh: 06-01-2021

Category	Indicator	Relationship	Next Update	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	
Business Investment	Average Weekly Hours - Retail	Procyclic	06-09-2021	1.32%	-0.33%	-0.55%	-0.33%		NOTES
	Small Business Sentiment	Procyclic	06-12-2021	-6.22%	-7.96%	-5.31%	0.69%		Values represent the percentage
	Weekly Economic Index	Procyclic	06-04-2021	-1.83%	-1.91%	2.90%	11.41%	11.52%	change from the previous year.
	Weekly Jobless Claims	Countercyclic	06-04-2021	293.76%	289.94%	-36.54%	-86.92%	-80.40%	change from the previous year.
Transportation and	Google Search "Travel Cancellation"	Countercyclic	06-08-2021	-13.33%	-55.56%	-86.03%	-83.92%		
Tourism	ISM Services Index	Procyclic	06-05-2021	4.87%	2,39%	7.50%	19.85%		In May, 9 out of 9 indicators are
	Restaurant and Bar Sales	Procyclic	06-15-2021	-18.63%	-18.71%	-2.33%	28.97%		signaling economic improvement from the previous year.
	Sentiment: Vacation Travel Next 6 Months	Procyclic	06-13-2021	-42.90%	-39.65%	-33.02%	-14.64%	7.77%	the previous year.
Consumer Big Ticket	Auto Sales	Procyclic	06-05-2021	-15.62%	-17.01%	-3.14%	26.16%		In April, 18 out of 20 indicators are
Purchases	Consumer Sentiment - Discretionary Spend	Procyclic	06-17-2021	-14.68%	-13.36%	-8.65%	8.04%	23.59%	signaling economic improvement from the previous year.
	Global Luxury Index	Procyclic	06-03-2021	35.33%	43.69%	63.25%	82.77%	23,3376	the previous year.
	Home Building Permits Issued	Procyclic	06-26-2021	18.28%	19.77%	21.63%	31.87%		
	,								Look to subsequent pages for month trend analysis.
Logistics and	Economic Policy Uncertainty	Countercyclic	06-02-2021	97.39%	39.01%	-50.04%	-77.11%	-73.48%	a cira dialysis.
Manufacturing	Industrial Production	Procyclic	06-29-2021	-3.24%	-3.28%	-1.89%	3.85%		•
	Overtime for Hourly Mfg Workers	Procyclic	06-08-2021	0.00%	2.48%	5.04%	17.76%		
	Purchasing Managers Index - Mfg	Procyclic	06-03-2021	20.37%	20.97%	22.72%	32.34%		
Financial	Financial Stress Index	Countercyclic	06-05-2021	39.62%	133.61%	-117.32%	-143.36%	-307.69%	
	S&P 500	Procyclic	06-02-2021	15.47%	18.54%	46.85%	50.73%	42.86%	
	US High Yield Index Option - Adjusted Spread	Countercyclic	06-02-2021	7.95%	-9.51%	-54.01%	-60.18%	-55.21%	
	VIX Volatility Index	Countercyclic	06-02-2021	84.84%	21.81%	-61.83%	-60.08%	-37.67%	Upward pressure on economy
									Downward pressure on economy

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#### INTRODUCTION





JD.com Sales (Net, USD bn, 2021)

Total Sales	350.6
Total Ecommerce Sales	336.5
Ecommerce Share of Total Sales	96.0%
Ecommerce Sales (1P)	200.8
Ecommerce Sales (3P)	135.7

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1,163 Stores in China (2021)



3.6% of total sales fulfilled by stores in 2020



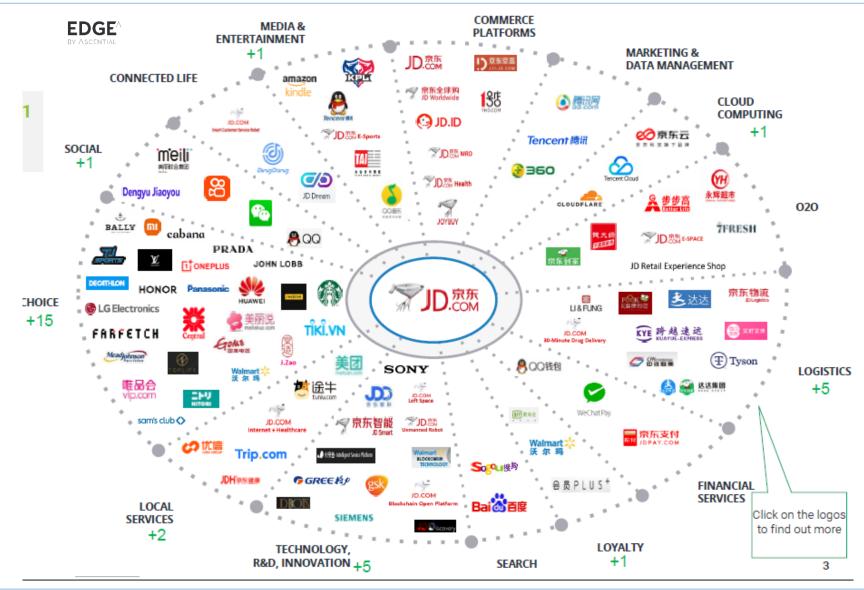


JD.com is expected to maintain its position as the 3<sup>rd</sup> largest ecommerce retailer in China with sales of USD 573bn by 2026. Its forecasted growth rate compares favorably to Alibaba, but trails that of Pinduoduo, the ecommerce group-buying business that has seen rapid growth in recent years.

EDGE Retail Insight











### Etsy to pay \$1.6B for fashion resale app Depop JOC.com

Etsy will acquire Depop, a fashion resale platform launched in the UK in 2011 that attracts Gen Z consumers, in a deal valued at \$1.62 billion. Depop operates in 150 countries and has about 30 million registered users, about 90% of whom are younger than 26.

### Everything's becoming a subscription, and the pandemic is partly to blame washington post

Delivery services, socks, razors, gyms, streaming services, and even restaurants and car washes. Some Americans are now signed up for 10 or more. It's bringing convenience — and a lot of monthly fees.

- Six restaurants in Washington, D.C., joined together earlier this year to sell a subscription supper club. They offered home delivery of a gourmet meal from a different chef each week for six weeks for \$360. It sold out in six days.
- Subscriptions boomed during the coronavirus pandemic as Americans largely stuck in shutdown mode flocked to digital entertainment and signed up for regular home delivery of boxes of items such as clothes and chocolate. But what really set the past year apart was the increase in subscriptions in the hard-hit services sector. Owners of restaurants, hotels, home-repair companies and others upended their traditional business models to try subscriptions and often found more interest and revenue than they anticipated.
- "This was really about flipping the business model for restaurants: paying before eating instead of eating before paying," said Vinay Gupta, a winemaker who spearheaded the Summerlong Supper Club in Washington and New York City.

#### Amazon and Casino strengthen partnership in France and announce new service **EDGE**^

- Amazon and Casino are strengthening their partnership in the French grocery market with the launch of a new click and collect service. Beginning in Annency and Clermont-Ferrand, Amazon Prime members will be able to order a selection of over 9,000 food items (including national brands and Casino private label), for collection at one of 180 Casino click and collect points implemented throughout France by summer 2022.
- Amazon's increasing portfolio of grocery retail partners in Europe, including Morrisons in the UK, Dia in Spain and Tegut in Germany, signifies its intent to move deeper into grocery.



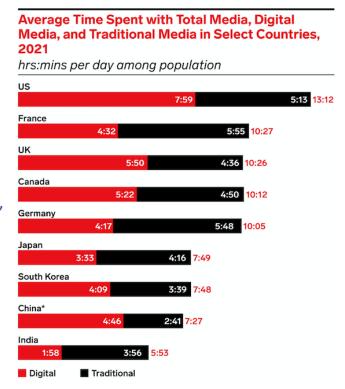


### Walmart unveils employee app – to give workers free Samsung phones to use it CSA

- Walmart store employees will have new mobile devices to go along with the chain's new proprietary corporate app.
- The discount giant plans to offer more than 740,000 employees— nearly half its U.S. workforce a new Samsung Galaxy XCover Pro smartphone, case and protection plan to use free of charge by the end of this year. Walmart is giving the phones to employees so that they can use a new app the company is rolling out. Although the employees will only be able to access the app's work features while they're on the clock, they will be able use the smartphone as their own personal device if they want. Walmart will not have access to any personal employee data.

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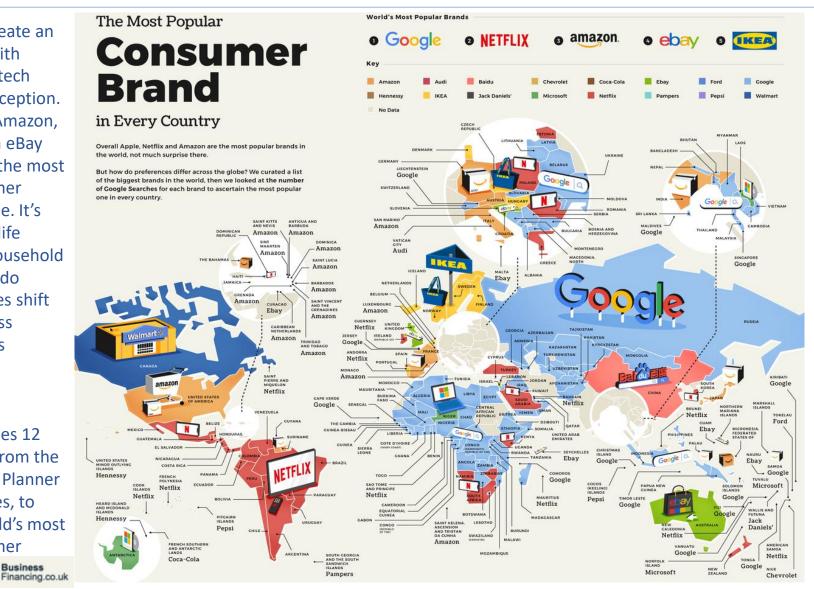
- Adults in the US will spend a daily average of more than 13 hours with media in 2021, with nearly 8 hours of that time going to digital media, specifically.
- In the European countries we forecast, the average will exceed 10 hours, while Asia-Pacific markets like China, India, and Japan will see significantly less media usage.
- The pandemic generated similar disruptions in consumer behavior around the world, and in most countries, this produced similar short-term changes in time spent with media. Going forward, however, trends will begin to diverge again.
- In the US and Canada, digital media is the dominant story, whether via connected TVs (CTVs), OTT video services, social networks, or digital audio providers. In Europe, France and Germany stand out for holding fast to TV while the UK leans more digital. As for Asia-Pacific, China and India rely overwhelmingly on smartphones for digital media consumption.







Strong brands create an emotional link with consumers, and tech brands are no exception. In fact, Google, Amazon, Netflix, and even eBay rank as some of the most searched consumer brands worldwide. It's hard to imagine life without these household names, but how do brand preferences shift and change across internet searches worldwide? This graphic from Business Financing compiles 12 months of data from the Google Keyword Planner and other sources, to uncover the world's most searched consumer brands.







### Ocado considers international retail expansion

- Ocado is considering the expansion of its retail business internationally over the next 5-10 years. Although Ocado's ideal approach is still to act as a technology provider to food retailers, it has not ruled out entering new markets on its own. Ocado is also expanding its rapid delivery service Zoom, with 20 additional Zoom sites under consideration following trials in West London.
- Ocado's bolstered long-term vision follows years of international expansion through Ocado Solutions, with seven partnerships live or going live in 2021 in markets including the US, France, UK and Sweden. A total of nine partners including Coles in Australia and Aeon in Japan will be live by 2023. Meanwhile, Ocado's plans on Zoom come as a wave of new rapid delivery services emerge, such as Getir, Gorillas, Weezy while Tesco has also moved into the space with partner Stuart.

#### Amazon backs postal service reform CA

- Amazon is publicly calling for legislation to revitalize its "first and oldest" business partner.
- In an official corporate blog post, Amazon cites how founder Jeff Bezos started Amazon by packing and driving book orders to his local post office. Now, Amazon says it contributes billions of dollars in profits annually to the U.S. Postal Service (USPS) by using their package delivery services.
- However, due to what Amazon terms "burdensome" funding mandates and declining letter mail, the USPS estimates it will lose \$160 billion over the next 10 years. In response, Amazon is publicly supporting the recently introduced bipartisan Postal Service Reform Act. According to Amazon, the legislation would implement policy reforms to help strengthen the USPS's financial and operational arms, as well as codify USPS practice to maintain an integrated delivery network of mail and packages six days per week.
- Amazon also publicly supports doing away with the Postal Service's 2006 mandate to pre-fund health benefits for retirees and integrating postal employees into the Medicare program, which the e-tailer says will "help stabilize" USPS's finances.
- "With the House Oversight Committee's swift advancement of the Postal Service Reform Act, we hope the full U.S. House and Senate will follow suit".





### FRA, FTA advance Hudson Tunnel project Progressive

- The Federal Railroad Administration (FRA) and Federal Transit Administration (FTA) last week jointly issued the final environment-impact statement and record of decision for the proposed Hudson Tunnel Project.
- Completion represents the U.S. Department of Transportation's commitment to working with New Jersey Transit and the Port Authority of New York and New Jersey, in coordination with other project partners including Amtrak and the Gateway Development Commission to advance the Hudson Tunnel Project toward final design and construction, according to a USDOT press release.
- The Hudson Tunnel Project is one component of the Gateway Program. Amtrak, NJ Transit, PANYNJ and the GDC are working with the other project proponents and partners, including the states of New York and New Jersey, to advance other components of the more encompassing Gateway Program.
- While no federal funding has been dedicated for the project to date, completion of these two steps is a prerequisite for FRA or FTA to direct future federal funding to advance this project through preconstruction activities such as engineering, final design development and property acquisition, as well as construction, USDOT officials said.

### Merger update: CP touts opposition to CN's use of voting trust Progressive

- Canadian Pacific today announced that more than 130 stakeholders have filed statements with the Surface Transportation Board (STB) asking it to reject CN's proposed use of a voting trust.
- This brings the total letters submitted to more than 960, including 250-plus expressing concern about CN and Kansas City Southern's combination, its use of a voting trust, or both, and more than 730 in support of CP-KCS, CP officials said in a press release.
- The opposition letters which came from shippers, ports, local governments, transportation associations and other stakeholders highlight the "extensive risks" the proposed CN-KCS voting trust poses to competition by reducing shipper options, CP officials said.
- The concerns echo those of the U.S. Department of Justice, which on May 14 filed comments with the STB objecting to CN's proposed use of a voting trust on the grounds that a CN merger with KCS would pose greater risks to competition than the CP-KCS agreement, according to CP.





#### Amazon Fuels North America's Most Severe Warehouse Shortage SupplyChainBrain

- Finding warehouse space around Toronto has never been harder, and the e-commerce fueled shortage is disrupting businesses and threatening the broader economy.
- With the pandemic driving a belated embrace of online shopping in Canada, Amazon has been gobbling up warehouses. That's pushed the vacancy rate in the Toronto area down to just 0.5%, making it the tightest market in North America, if not the world.
- Logistics consultant Richard Kunst is seeing the fallout first-hand, as companies try to fill orders and move merchandise. One client, a food manufacturer, has been forced to pack roughly a third of its orders in a parking lot. Others are so desperate for space Kunst has advised they ask local farmers if they can keep goods in their fields.
- "It's cheaper to go to a farmer and say, 'tell me how much you're going to make off a crop on a five-acre lot, and I will pay you that, plus 10%, in order to drop containers here,'" Kunst said.
- While the warehouse shortage is most acute in Toronto, other major cities in Canada aren't far behind, with Victoria, Vancouver and Montreal rounding out North America's top four tightest warehouse markets, according to real estate brokerage Colliers International Group Inc.
- The single biggest driver of this squeeze has been Amazon.com. The pandemic has seen the e-commerce giant increase its logistics footprint by nearly 12 million square feet across nine major Canadian markets since the end of 2019, according to Colliers.
- That includes taking a quarter of all the space that came up for lease in Toronto last year, while boosting its footprint 10 times in Montreal and quadrupling in Ottawa.
- With new warehouse supply lagging the soaring demand, the brokerage CBRE has predicted Canada could run out of space entirely by the end of the year. That's starting to raise alarms that Canada's overall economy could be dragged down, just as it starts to recover from the pandemic. Government figures from 2015 found logistics costs amounted to about 9% of gross domestic product.
- To deal with these pressures, developers are starting to explore converting office towers and shopping malls into
  logistics space. Amazon's Canadian distribution unit recently purchased a defunct flea market in a suburb of Toronto.
  Still, the problem may ultimately come down to land.





### US railroads tightening free time at inland terminals 🔊 JOC.com

BNSF will adjust its free time calculations on June 7, tightening the window for shippers to pick up containers that are made available after 5:00 p.m., just two weeks after Norfolk Southern slashed its free time clock.

### Union Pacific again raising intermodal surcharges in California 🦣 JOC.com

Union Pacific has raised surcharges out of California for a second time in 2021, a sign it is concerned about having enough rail-owned 53-foot containers to supply core contract customers through the upcoming peak season.

### Manufacturing remains on a growth track in May, reports ISM LOGISTICS

- Manufacturing activity, for the month of May, remained on a strong growth path, according to data issued today by the Institute for Supply Management (ISM).
- In its monthly Manufacturing Report on Business, ISM said that the report's key metric, the PMI, at 61.2 (a reading of 50 or higher indicates growth), saw a 0.5% increase, from April to May. This marked the twelfth consecutive month of PMI growth, coupled with May also representing the twelfth consecutive month of growth for the overall economy. And the May PMI is 2.8% above the 12-month average of 61.2, with March's 64.7 being the high and June 2020's 52.2 being the low for that period.
- ISM reported that 16 of the 18 manufacturing sectors it tracks saw growth in May including: Furniture & Related Products; Nonmetallic Mineral Products; Plastics & Rubber Products; Textile Mills; Primary Metals; Computer & Electronic Products; Electrical Equipment, Appliances & Components; Fabricated Metal Products; Food, Beverage & Tobacco Products; Machinery; Chemical Products; Miscellaneous Manufacturing; Transportation Equipment; Wood Products; Paper Products; and Petroleum & Coal Products. The only industry contracting in May was Printing & Related Support Activities.
- New orders, which are commonly referred to as the engine that drives manufacturing, headed up 2.7% to 67.0, growing, at a slower rate, for the 12th consecutive month. ISM said 16 of 18 manufacturing sectors reported growth in May. Production—at 58.5—was off 4% compared to April, growing, at a slower rate, for the 12th consecutive month, and was also down nearly 10% compared to the recent high, of 68.1, in March.





#### Container ship scores 'off the charts,' 'fantasy' charter rate: \$135,000/day American Shipper

- In a sign of just how frenzied the container market has become, a freight forwarder is reportedly paying \$135,000 per day for a short-term charter of the S Santiago, a 15-year-old container ship with a capacity of 5,060 TEUs.
- "Charter rates for short employment ... have gone out of control," said Alphaliner in its new weekly report.
- "Depending on the sources, the ship would have obtained anything between \$100,000 and \$145,000 per day, an absolute historic high. The name of the charterer has not been fully confirmed, although it is believed to be a forwarder."
- An industry source speaking to American Shipper on condition of anonymity said the rate was \$135,000 per day, the duration was 45-90 days (one round voyage with an option for a second) and the charterer was Chinese freight forwarder 3 Seas.
- The source said that there is "more and more enquiry every day" with "people panicking now" amid "unprecedented times."
- Alphaliner said that "this colossal rate is substantially higher than the already whopping \$70,000-\$90,000 per day depending on the final duration agreed recently by Hapag-Lloyd for a two- to three-month employment of the 4,308-TEU CMA CGM Opal."
- The historic S Santiago transaction is yet another big red flag for cargo shippers. Charter rates like this only make sense if freight rates are high enough for the charterer to turn a profit.
- It also underscores just how tight vessel supply is.
- Alphaliner reported that only 2.7% of the global container fleet was inactive as of May 24, totaling 660,662 TEUs. Of that, 70% (461,779 TEUs) was inactive due to ships being in the yards for repairs or maintenance.
- And cargo shippers will not be getting any relief in the near or medium term from newbuild deliveries.
- There has been a surge of orders recently, but those are for 2023-2024 deliveries. Clarksons Research Services estimates that fleet growth in 2022 will fall to 2.5% from 4.6% this year.
- According to Alphaliner, "The market has become one of long-term charters, with 43 of the 51 fixtures reported in the past two weeks concluded for durations of 24 months or over." Of that total, three charters were for five years' duration, nine were for four years, 10 for three years and the remainder for two years.





#### Higher FedEx Surcharges Starting June 2021 **GIFMS**



FedEx announced effective June 21,2021 they were updating and increasing several Peak Season Surcharges. Imposing double digit increases that will continue past the original targeted expiration date of June 20, 2021. Effective June 21st, FedEx will adjust several key Peak Season Surcharges (See Table below). All increases will remain in effect until further notice.

#### US Import volume surge set to continue Joc.com



- The surge in US import volumes from Asia that began last summer is expected to continue through the traditional back-to-school peak shipping season, giving trans-Pacific carriers and major port gateways little time get vessels back on schedule and clear existing backlogs. At the same time, the transition to new service contracts is making US importers' scramble for eastbound trans-Pacific capacity from Asia even more difficult as new minimum quantity commitments (MQCs) bump up against limited vessel capacity.
- With Los Angeles and Long Beach continuing to handle the vast majority of inbound freight from Asia, terminal operators at the country's busiest port complex are concerned that increasing rail container dwell times at their facilities will severely compromise their ability to handle import volumes during what promises to be a peak season that arrives four to five weeks early this summer. On the East Coast, the arrival of the largest container ship to ever call the region, the 16,000-TEU CMA CGM Marco Polo, is a signal that New York-New Jersey and other gateways can expect to see continued growth in volumes from Southeast Asia.

Worker injured as OOCL Durban wipes out Kaohsiung gantry cranes In this YouTube video, the 8,540 teu OOCL Durban, appears to have started a sequence of events upon its arrival alongside at Kaohsiung, Taiwan, this morning, leading to the collapse of two gantry cranes onto a stack of Yang Ming-liveried containers. Local press reported that one port worker suffered minor injuries in the accident. Several more were trapped but were later freed uninjured.







#### US transport board voices concern over rail preparedness for peak THELOADSTAR

- Marty Oberman, chairman of the US Surface Transportation Board (STB), is a prolific letter writer these days, and
  has penned several missives to CEOs of the Class I rail companies and the Association of American Railroads
  expressing concern over service issues.
- One letter is asking for an update on their preparations for the upcoming peak season, borne out of concern over reports from shippers of recent service problems.
- The STB has received reports "from a meaningful number of rail customers of subpar performance," he wrote.
- He cites missed switches, railcar delays at intermediate yards or interchanges, extended out-of-route movements
  and prolonged dwells at origin for some unit train traffic, as well as delayed arrivals and disruptions to container
  availability.
- He is worried about a possible relationship between some of these problems and low staffing.
- He acknowledges that these service issues, at least to some extent, have been related to workforce reductions caused by the pandemic and its repercussions, "but I am also concerned by the extent to which these service issues may be related to, or exacerbated by, a broader trend of rail labour reductions that has been occurring over the past several years," he says.
- And another letter went to the Association of American Railroads: a follow-up on congestion issues and concerns
  about chassis availability that had been brought to the STB in April and forwarded to the rail interest group. Instead
  of addressing these points, the AAR had responded by questioning the STB's authority over these issues, according
  to Mr Oberman.
- US rail volumes have been going strong. For the week ended 29 May, the AAR reported rail carloads 27.2% higher than a year ago, while intermodal containers and trailers were up 20.4%. For May, the AAR registered a 30.4% increase in carloads and a 26.2% gain in intermodal containers and trailers.
- "Intermodal just had the best January-to-May period ever for US railroads," the AAR noted.
- The Intermodal Association of North America has registered growth in the past three quarters and expects to see further gains. It projects volumes to rise 6.3% this year, after a 2% drop in 2020.





### Supply Chain Fight of the Century: Walmart versus Amazon Supply Chain Digest™ Your First Stop for Supply Chain Information

- Walmart is still quite a bit larger than Amazon, with revenues this past year of \$559 billion compared with \$386 billion for Amazon. But that nearly \$200 billion gap was a lot bigger just a few years ago: In calendar 2016, Walmart had \$485 billion in sales, while Amazon was much smaller \$126 billion. Right now, both retailers are taking aim at the other's core business.
- Amazon is gunning for a big share of the giant \$1.3 trillion US grocery market though a bit oddly to me, given it is historically a very low margin business. And it appears Amazon believes it requires a large brick & mortar store network to reach that objective.
- This is not likely an existential threat to Walmart (as well as Kroger and others), but that doesn't mean it is not a very serious one. More than 50% of Walmart's US revenue comes from its grocery products.
- Walmart is doing everything it can to cut into Amazon' enormous lead in ecommerce. Walmart has just a 7% share of the US ecommerce market compared to Amazon's 40%, though that's just an estimate, since Walmart does not report its ecommerce revenues.
- In its quarter ending in April, Walmart reported that ecommerce sales in the US rose by 37% impressive, to be sure, but less than the massive 44% growth seen at Amazon in its first quarter ending in March.
- Walmart views its some 5,300 US stores as a decisive advantage in the ecommerce war with Amazon. It upped the ante in late 2019, when McMillon told key managers that the nearly 200,000 square feet Superstores, which handle everything from tires to groceries, will serve as hubs that tie all the company's offerings together.
- It is estimated 90% of consumers live within 10 miles of a Walmart. Even with its hundreds of fulfillment centers and local delivery stations, Amazon can't come close to Walmart's store network, which may enable it to deliver cheaper and faster than Amazon or make it more convenient to pick up at a store.
- Hence Amazon's rollout of brick & mortar groceries.
- "It's competition for top of mind: what is the place you think of when you think, 'I want to buy a soccer ball, I want a dress, I want ground beef'," Janey Whiteside, Walmart's chief customer officer, told Financial Times.
- ChannelAvisor, says that if Walmart is "able to crack the digitization of grocery [meaning being able to do it profitably], that's a huge opportunity for them to keep Amazon at bay."





#### Yantian terminal congestion to take at least week to clear **Joc.**com



After a COVID-19 outbreak, Yantian International Container Terminal on Monday began accepting export cargoes, but shipping executives say the congestion will take at least a week to clear.

### Oakland, Seattle-Tacoma act on mounting vessel congestion Joc.com



Oakland and Seattle-Tacoma are scrambling to address mounting congestion problems as carriers add services there to circumvent even worse congestion in Los Angeles-Long Beach.

#### US port congestion, capacity woes force project cargo rerouting Joc.com



As container vessels and freight clog major ports, oversized and overweight project cargo is being rerouted coast to coast, driving up ocean shipping and inland transportation costs.

### Port of London Authority to build on growing power demand in new green study PORT (September 2015)



- The Port of London Authority (PLA) will gauge the future energy demands of stakeholders using the Thames River in a new green study.
- The study, to be undertaken by Royal HaskoningDHV, will look at the different needs across the tidal Thames to build on its updated strategy for the river: Thames Vision 2050.
- The PLA is a conservancy authority, servicing the river which holds major container terminals including DP World London Gateway and the Port of Tilbury's London Container Terminal.

### Port of New York and New Jersey sees ninth month of cargo growth PORT PORT



- The Port of NY/NJ and New Jersey's seaport cargo volumes increased for the ninth month in a row to reach 18% above pre-COVID-19 pandemic levels in April 2021.
- In a statement, the Port said it still projects a \$3 billion loss for the 24-month period covering March 2020 and March 2022 due to the effects of the pandemic.
- In total, it handled 712,799 TEU in April 2021.





#### Container prices surge in Europe as Carriers favour loading empties **Sea**news

- For European exporters looking to source shipping containers, existing shortages could deteriorate significantly in the coming weeks, according to the latest data from Container xChange, the world's leading online platform for the leasing and trading of shipping containers.
- Most pricing and availability indicators now suggest carriers are continuing to favour shipping empties back to Asia as fast as possible to maximize yields on front-haul services rather than wait for less lucrative backhaul loads.
- The upshot for shippers is rapidly rising prices in Europe for containers even though CAx availability readings point to higher availability of boxes in European hubs Container xChange figures do not track empty moves.
- "The confluence of theoretical high availability and soaring prices for boxes strongly indicates that container lines are prioritizing empty containers over export cargo from Europe," said Dr Johannes Schlingmeier.
- "There were signs of this even before the Suez Canal closure in late March. The latest figures suggest the additional disruption this caused has exacerbated the situation and made it even harder for exporters to find empties."
- The latest container trading data reveals that between January and April average prices for used 20 ft. containers across Europe rose 57% from \$1,348 to \$2,119.
- In April, price increases for 20 ft. containers were especially severe. In Antwerp prices jumped by 30% compared to March. In Hamburg they rose by 16% over the same period while in Rotterdam they increased 12%.
- Since the beginning of May, average prices for 20 ft. dry containers in Europe softened slightly to \$2,249 from \$2,110 in April. However, prices for 40 ft. dry containers have again increased this month, up 13% to \$3,112 from \$2,750 in April.
- According to Container xChange forecasts, an increase in incoming shipping containers by 4-5% over the next weeks is likely to not only increase CAx readings but also contribute to slowly decreasing container prices again.
- These are good times for equipment owners across Europe as indications are that even if container prices dip slightly, scarcity will remain until carriers change tack and start looking for more backloads. As a result, container prices are likely to remain at elevated levels for some time, although we do think availability for exporters will improve in the coming months.



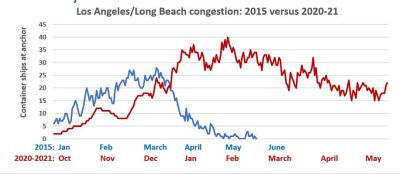


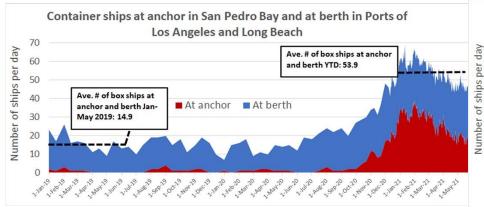
### Suez Canal Authority softens stand on Ever Given while blame game continues Salipping

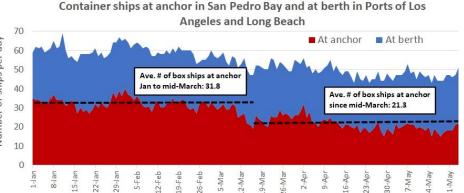
- On the 13th of April, the ship was arrested by the Suez Canal Authority (SCA) in Egypt on the back of its claim for a sum of US\$916 million on 7th of April 2021, to cover losses during the Ever Given's grounding in the Suez Canal.
- The ship remains at the Bitter Lakes area under arrest by the Suez Canal Authority till date.
- The ship owners, UK P&I Club and the SCA have been locked in discussions over several days/weeks since the all clear for the vessel to sail was given, but despite 2 failed court bids by the owners, the ship remains arrested.
- Reuters is reporting that "the authority failed to prove any fault by the ship. Recordings from the ship that were presented to the court showed disagreements between SCA pilots and its control centre over whether it should enter the canal." The case is now going back to court on the 29th of May.
- This is more than two months after the vessel was first stuck.

#### LA/LB congestion by the numbers FREIGHTWAVES

American Shipper mapped the curves of ships at anchor during 2015 against the current curve. 6 Years ago, the disruptions peaked 3 months after they began and came down quickly. The current crisis is already almost three times as long as the prior one.









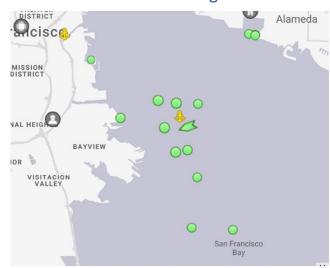


#### California's massive container-ship traffic jam is still really jammed FREIGHTWAVES

- Peak shipping season is coming soon and the "parking lot" of container ships stuck at anchor off the coast of California is still there, with Oakland surpassing Los Angeles/Long Beach as the epicenter of congestion.
- Shipping giant Maersk warned in a customer advisory on May 26 that Los Angeles and Long Beach "remain strained with vessel wait times averaging between one to two weeks." But it said, "the situation is even more dire at the Port of Oakland, where wait times now extend up to three weeks."
- West Coast port delays are having severe fallout for liner schedules. Congestion in California equates to canceled voyages as ships can't get back to Asia in time to load cargo. Even as U.S. import demand soars, the effective capacity in the trans-Pacific trade is being sharply curtailed by voyage cancellations.
- That means even longer delays, even higher all-in freight rates and a cap on how much can be shipped at any price.
- Maersk said that 20% of its capacity from Asia to the West Coast has been lost year to date as a result of induced "blank" (canceled) sailings. It currently expects 16% of its Asia-West Coast capacity to be lost from now until the end of June and 13% to be lost from now until the end of August. "This unfortunately means Maersk may not be able to

fully honor its original allocations for all customers.

 As of May 26, there were around 10 container ships anchored off Oakland, according to Automatic Identification System (AIS) ship-positioning data from MarineTraffic. But that's less than half the story. Off the coast, there were an





additional 15 or more container ships drifting in the Pacific.





#### Hapag-Lloyd raises box order to 'counteract the container shortage' American Shipper

- Hapag-Lloyd has increased its container order by 60,000 twenty-foot equivalent units (TEUs).
- Lack of containers and slow turn times are particularly apparent during U.S. import surges. That shortage becomes
  much more than a blip on a FreightWaves SONAR chart when the import surge is as long-lasting as the one U.S. ports
  have been experiencing since Chinese factories reopened after COVID-19-forced lockdowns last year and U.S.
  consumers turned to e-commerce in droves.
- U.S. ports' exports of empty containers have skyrocketed as part of an industry effort to get boxes back to Asia as quickly as possible to be refilled and shipped out again. At the Port of New York and New Jersey, for example, the number of exported empties in March leapt 77.5% year-over-year.
- The port said those 267,542 TEUs of exported empties reflected "the need to reposition empty containers around the globe to provide the equipment necessary to support the strong cargo demand."

### Turkish President Erdogan Vows to Begin Construction on Canal Istanbul *Captain*

- Turkish President Recep Tayyip Erdogan said the construction of a multi-billion-dollar canal, an alternative to Istanbul's Bosporus strait, will begin at the end of June as the pandemic continues to take its toll on the country's ailing economy.
- Erdogan's announcement on Saturday came a decade after he first revealed his "crazy project" and at a time when his support has hit an all-time low. The 45-kilometer (28-mile) Canal Istanbul would cost around \$15 billion and link the Black Sea with the Sea of Marmara, officials say.
- The government says it is meant to ease shipping traffic and the risk of accidents in the Bosporus, which bisects Turkey's biggest city.
- The planned waterway is projected to create a new city of half a million, with several bridges connecting the two sides. Shares of Turkey's state-run property developer Emlak Konut and cement-maker Akcansa Cimento, a partnership between HeidelbergCement and Sabanci Holding, climbed as much as 6.4% and 7.6%, respectively on Monday.
- Istanbul's Mayor, who's seen as a future challenger to Erdogan, is opposed to the project, saying it would "annihilate" water resources for Istanbul's 16 million residents, ruin the province's nature beyond repair and make it unlivable.





#### Dominion Energy Reaches Deal on Charter of First Jones Act-Compliant Wind Turbine Installation Vessel [ Captain

- The first Jones Act-compliant wind turbine installation vessel (WTIV) has received its first charter for the construction of two offshore wind farms in the U.S. Northeast.
- The chartering of the Dominion Energy vessel by Ørsted and Eversource was announced Tuesday. The vessel, named Charybdis, will be used to install Ørsted-Eversource's Revolution Wind and Sunrise Wind, two of the nation's first large-scale offshore wind farms subject to regulatory approval. The two projects are expected to generate more than 1.6 gigawatts of clean, renewable energy to nearly 1 million homes in Rhode Island, Connecticut and New York.
- The charter's terms will allow the Charybdis to also support construction of Dominion Energy's 2.6 gigawatt Coastal Virginia Offshore Wind (CVOW) project off the coast of Virginia Beach, which is expected to be completed in 2026 subject to regulatory approvals.
- The 472-foot Charybdis, with a price tag of approximately \$500 million, is currently under construction in Brownsville, Texas at the Keppel AmFELS's shipyard. Once complete, the vessel will be homeported in Hampton Roads, Virginia.

#### Exporting restarts at Yantian, but carriers bypass port as congestion reigns THELOADSTAR



- Export operations resumed at Shenzhen's port of Yantian on Monday, but a 20,000-container backlog and slow productivity means at least another week of delays.
- The past 48 hours saw a raft of schedule omissions, with ONE announcing 12 of its vessels would skip Yantian and nearby Shekou between 30 May and 13 June, and a further two services switching to Nansha, in Guangzhou.
- Hapag-Lloyd said it was temporarily switching two of its Far East loop sailings to Nansha, while Maersk said it would omit nine calls at Yantian and one at Shekou.
- There are reportedly some 40 containerships at Yantian waiting for a berth, and a 20,000-container backlog, according to Chinese media.





# **Beverages, CBD & C-Stores**

### Krispy Kreme files for \$100M IPO FIRESTAURANT DIVE

- Krispy Kreme filed for a \$100 million initial public offering on Tuesday. The donut chain will trade on Nasdaq under the ticker symbol DNUT.
- Krispy Kreme will use the net proceeds gained from the offering to pay off outstanding debt under a 2019 revolving credit facility, according to a Form S-1 document. The company has \$1.2 billion in total debt and reported \$3 million in losses for the guarter ended April 4. The chain's revenue rose 23% to \$321.8 million for the period.
- Krispy Kreme was previously a public company until 2016 when JAB Holdings acquired the chain for about \$1.35 billion. The company's last foray as a public company, which began in 2001, started strong with company's shares priced at \$50 each just a few years after its IPO, according to Mashed.

### 7-Eleven Charges Ahead With 'Massive' Electric Vehicle Installation Project Convenience Store

- 7-Eleven Inc.'s latest initiative calls for installing at least 500 Direct Current Fast Charging (DCFC) ports at 250 select convenience stores in the United States and Canada by the end of 2022.
- The convenience retailer will own and operate the new DCFC ports. They will build upon 7-Eleven's 22 electric vehicle (EV) charging stations located at 14 c-stores in four states.
- 7-Eleven reached that reduction goal in 2019, eight years ahead of schedule.
- According to the retailer, it is improving sustainability by seeking renewable energy solutions for its stores across the country. Initiatives include:
  - Purchasing 100-percent wind energy for 800-plus Texas stores and 300-plus Illinois stores;
  - Using hydropower at 150 stores in Virginia; and
  - Using solar energy to power 300 stores in Florida.
- Additional details regarding 7-Eleven's environmental, social and governance strategy will be announced later this
  year.
- Irving-based 7-Eleven operates, franchises and/or licenses more than 77,000 stores in 16 countries and regions, including 16,000 in North America.





### **Healthcare Update**

#### **Little-Known Illnesses Turning Up in Covid Long-Haulers**

Many POTS (postural orthostatic tachycardia syndrome) patients report it took them years to even find a diagnosis. There are only 75 board-certified autonomic disorder doctors in the U.S.

Other doctors, however, have studied and treat POTS and similar syndromes. The nonprofit organization Dysautonomia International provides a list of a handful of clinics and about 150 U.S. doctors who have been recommended by patients and agreed to be on the list.

Dr. Peter Rowe of Johns Hopkins in Baltimore, a prominent researcher who has treated POTS and CFS patients for 25 years, said every doctor with expertise in POTS is seeing long-haul covid patients with POTS, and every long-covid patient he has seen with CFS also had POTS. He expects the lack of medical treatment to worsen.

Long-term symptoms are common. A study published in February in the Journal of the American Medical Association's Network Open found that 27% of covid survivors ages 18-39 had persistent symptoms 3 to 9 months after testing negative for covid. The percentage was slightly higher for middle-aged patients, and 43% for patients 65 and over. The most common complaint: persistent fatigue. A Mayo Clinic study found that 80% of long-haulers complained of fatigue and nearly half of "brain fog."





# **Healthcare Update**

#### Pfizer Vaccine Possible Heart Risks Need Study, Not Panic Bloomberg

With the U.S. and other countries now vaccinating adolescents, Tuesday's report from Israeli scientists of a probable link between the Covid-19 shot developed by Pfizer Inc. and BioNTech SE and rare cases of heart inflammation in young men is understandably concerning. Parents worry about their kids, and public health officials must treat this possibility seriously without causing undue panic. But the data is limited as of now, to the point where a connection might not exist. And from what we do know, if there is a relationship, it doesn't appear to be dangerous.

#### Finally, Weary Seafarers Are Coming Ashore for Covid Vaccines SupplyChainBrain

- Ports around the U.S. are rolling out vaccines for seafarers, extending a lifeline to thousands of mostly foreign workers who've spent the pandemic isolated aboard ships ensuring goods kept trading across a battered global economy.
- From Boston to Houston and Los Angeles, and even in smaller trade gateways like Gulfport, Mississippi, local health officials and nonprofits are boarding container ships, tankers and other cargo carriers to administer COVID-19 shots or, when possible, shuttling crews to nearby pharmacies and clinics.
- The preferred vaccine for maritime workers: the one-dose Johnson & Johnson shot because they're often docked for just a day or two.
- In Los Angeles and nearby Long Beach, California, home of the nation's largest port complex, a vaccination program that began in mid-May has reached about 500 visiting sailors on 11 container ships as of late last week, city spokeswoman Chelsey Magallon said.
- Similar efforts are getting under way at nearly 50 U.S. seaports, according to a list maintained by the North American Maritime Ministry Association.
- Throughout the pandemic, seafarers have suffered a doubly harsh form of cabin fever. Travel restrictions prevented crew changes, forcing many to stay aboard beyond their original contracts and the 11-month limit set by maritime law. They've also been banned from disembarking in port for fear of spreading Covid or putting their vessel into quarantine for a week or more at the expense of millions of dollars.





### **Healthcare Update**

#### Can We Build a Domestic Supply Chain for PPE? SUPPLYCHAINBRAIN

- Kezia Fitzgerald, co-founder of CareAline, tells how her company responded to a need for isolation gowns during the COVID-19 pandemic, and describes what it will take to set up a domestic supply of personal protective equipment (PPE) for the future.
- The pandemic caused U.S. hospitals and healthcare workers to realize that they were more dependent on an overseas supply of PPE than they had thought. When COVID-19 hit, supplies of critical materials quickly dried up, as hospitals exhausted existing stocks. "They didn't have the infrastructure in the states anymore to quickly ramp up production for an emergent situation like COVID-19," Fitzgerald says.
- One of the biggest needs that arose during the pandemic was for isolation gowns. That's when CareAline, a maker of vascular access devices, stepped in. Working with a manufacturer in Massachusetts, it began producing the gowns. It was aided by a grant from the Massachusetts Emergency Response Agency, which provided resources for meeting testing requirements and ramping up production. The company designed the gowns based on input from hospital partners. A key element of the gowns was their suitability for reuse. One gown can withstand 100 industrial washes,

Fitzgerald notes, meaning that much less manufacturing capacity and warehouse space was required to produce and store the item. The manufacturing process for reusable gowns involves 99% less waste and 40% less water consumption than disposable versions.

• Fitzgerald sees the need for establishing a strong source of PPE in the U.S., an effort that will require changes in practice at both the private and government levels. The switch to reusable items will help to secure a viable stockpile and better prepare the nation for the next health crisis, she says. At the same time, some foreign sourcing will continue to be required.







# **Cybersecurity Update**

### Major Meat Processor Suffers Cyberattack GROCER

- One of the world's largest meat processors has become the latest victim of a cyberattack. JBS USA released a statement on May 30, indicating that it was the target of an organized cybersecurity attack affecting some of the servers supporting its North American and Australian IT systems.
- JBS wasn't aware of any evidence that customer, supplier or employee data had been compromised or misused as a result of the cyberattack.
- This security breach follows the Colonial Pipeline cyberattack in the United States in early May that led to panic buying of gas in the Southeast and subsequent gas shortages.

#### Three reasons why passwords aren't going away any time soon Security

- Passwordless continued to make headlines at Microsoft's Ignite conference in March, when the company announced passwordless login is a now a standard feature for Azure Active Directory. The introduction of Temporary Access Pass alongside Azure AD passwordless features, marks another milestone in their journey towards eradicating passwords.
- Removing passwords is a solid goal as they are fraught with vulnerability issues reuse, common construction patterns and the almighty leaked password problem. However, Microsoft's announcement really means that users will be required to use their passwords less often.
- These are the three reasons why most organizations are not ready to abandon on-premises Active Directory and move towards a cloud-only model.
  - 1. **Hybrid directory will continue to dominate** -Passwords will continue to persist for the vast majority of organizations that are dependent on Active Directory.
  - **2.** Passwordless methods still rely on passwords in the background Passwords continue to be the failsafe method for various services that market themselves as passwordless.
  - 3. Cybersecurity risks associated with passwordless Microsoft uses Temporary Access Pass to provide a timelimited passcode that can be used to enroll in another authentication.





### **Alternative Energy Update**

#### Here's Why We Can't Wait For The VW I.D. Buzz Microbus hotcars.com

Once a mere concept, Volkswagen's all-electric luxury minivan is confirmed for production next year, and we can't wait.

- Since the departure of the original air-cooled Volkswagen Type-2 microbus, brand loyalists have longed for a true successor. Though significant in their own right, Volkswagens intended successors never evoked the same emotions that led to the Type-2 becoming an automotive icon. Volkswagen teased a return of a microbus with retro-styling and authentic cab-forward design since the early 2000s but never followed suit.
- Despite initially concluding a microbus revival would not be financially viable on the mass market, the ever-fickle buying public quickly evolved in the 2010s. With the widespread adoption of EVs and premium minivans, the concept of a new microbus quickly became viable, the I.D. Buzz was born. In 2020 Volkswagen confirmed that they were moving forward with production and are currently gearing up for its release in Europe next year. With so many great attributes, it's hard to wait for Volkswagen to revolutionize the microbus once again.
- The range is among the most critical attributes of an electric car. As the first all-electric minivan, the I.D. Buzz will be a class leader with the long-range version delivering 372 miles of combined driving on a full charge, a number that is larger than many competing cars that offer half the versatility.

• Another drawback to electric cars has always been price. With the cost of battery production, E.V.s with reasonable range has been limited to luxury and ultra-luxury price classes. Though despite its boutique styling, the I.D. Buzz aims

itself at middle-class families as a serious minivan alternative. Prices for the U.S. market will start at just below \$40,000 for passenger iterations. In line with the average \$38,000 that Americans pay for a new vehicle.









### **Alternative Energy Update**

### Hydrogen-Powered Vehicles In Logistics

- At present there are two leading prospects for 'alternative' vehicle fuels to replace oil-based fuels: hydrogen and electrical batteries. The attractions of hydrogen as a fuel are several-fold but there are problems. When considering hydrogen as a fuel for vehicles, its strengths and weaknesses shape the attractiveness of hydrogen as a viable option.
- The attractions of hydrogen as a fuel are several-fold.
  - It is super-abundant, present in the air and an element in numerous other materials, notably water
  - It reacts exothermically without the presence of oxygen
  - It can be stored fairly easily for long periods of time
  - It has a very high energy-to-weight ratio
  - Although 'flammable' in the presence of oxygen or air, its low density at ambient temperatures means that it is less hazardous than gasoline

    Manufacturing Hydrogen
  - It is not a carbon-based fuel.
- Some of the problems
  - Although it is abundant, it is hard to isolate.
     Doing so requires energy
  - At ambient temperatures it is a low-density gas.
  - Compressing it requires energy
  - It reacts with a number of other materials, which complicates handling.
  - When considering hydrogen as a fuel for vehicles, these strengths and weaknesses shape the attractiveness of hydrogen as a viable option.
  - Although hydrogen is super-abundant, it is expensive to turn into fuel.

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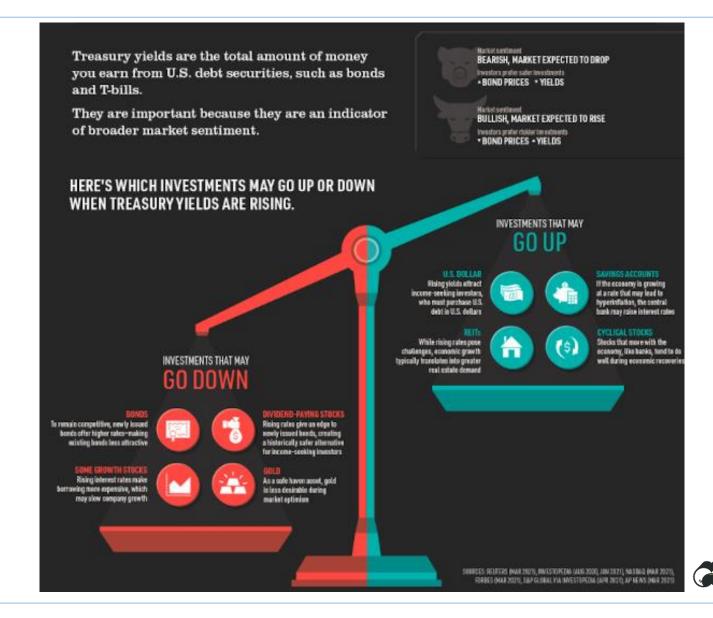
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Source: Shell





### **How Rising Treasury Yields Impact Portfolios**





VISUAL CAPITALIST









### Corn: In a Bushell

