



WEBINAR

Raw Material Insights

September 23, 2021

With: Nexans Canada & Dow



ATTENTION

AUDIENCE PARTICIPATION

- **Questions can be asked at any time using the chat function on the webinar screen**
- **Any unanswered questions will be followed up through email**
- **This presentation, a recording of the webinar and a brief survey will be emailed to all registrants**

PRESENTERS



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Product Director,
Dow



AGENDA

- Nexans Canada Introduction
- Copper Trends
- Copper Hedging Options by Nexans
- Dow Introduction
- Expectations for the upcoming months
- Key Takeaways
- Q&A

Nexans is a global leader with a long legacy in Canada



Weyburn, SK

Fergus, ON

Montreal, QC



1911  **canada[®]
wire**

Started with Canada Wire in Toronto, ON

3 Plants

750+ Products

- Residential, Commercial, Industrial & Utility
- Copper Rod & Wire



Nexans Canada – Standard Product Portfolio



Residential

- Bare Copper
- CANADEx[®] NMD90
- HEATEX[®] NMD90
- SUPERVEX[®] NMWU

Commercial

- AC90
- CORFLEX[®] Armoured Cu & Al
- INSTAGLIDE[®] RW90 & RWU90 Cu & Al
- INSTAGLIDE[®] T90 Nylon Cu & Al
- TWU

Renewable Energy

- RPVU90 2 kV Cu & Al
- ENERGEX[®] Medium Voltage 90°C 15 to 46 kV
- ENERGEX[®] Medium Voltage 105°C
- ACSR

Industrial

- ACWU90
- CP-100 Railway Signal
- DriveRx[®] VFD
- FIREX[®] TECK90 – 600 V, 1 kV & 5 kV
- FIREX[®] Medium Voltage Armoured Power Cable

Transmission/Distribution

- Bare ACSR & AACSR
- Bare Aluminum & Al Alloy
- Covered Overhead Distribution Line Wire
- ENERGEX[®] CN & SP Medium Voltage
- NS75 & NS90
- Street Light Cable
- USE175 & USE190 & USEB90

Copper Rod & Wire

- Copper Rod
- Copper Wire



Industry Education

Our Previous Webinar Recordings

- **Renewable Energy Trends** – click [here](#) to watch it
- **Emerging Trends for Utility Cables** – click [here](#) to watch it
- **Key 2021 Electrical Code Changes Impacting Wire and Cable** – click [here](#) to watch it
- **15 kV Medium Voltage Armoured Cables** – click [here](#) to watch it
- **Connected Drums - Nexans Canada's Reel Tracking Solution** – click [here](#) to watch it
- **DriveRx® VFD Cable 2.0** – click [here](#) to watch it
- **CORFLEX®** – click [here](#) to watch it
- **Prior VFD webinar** – click [here](#) to watch it

Nexans: Contributing to Carbon Neutrality by 2030





Copper Trends

1. Supply
 - Production by region
 - North America cathode production
 - Global and USA copper inventories
2. Price fundamentals
3. Demand indicators
4. Supply vs demand
5. Price forecast

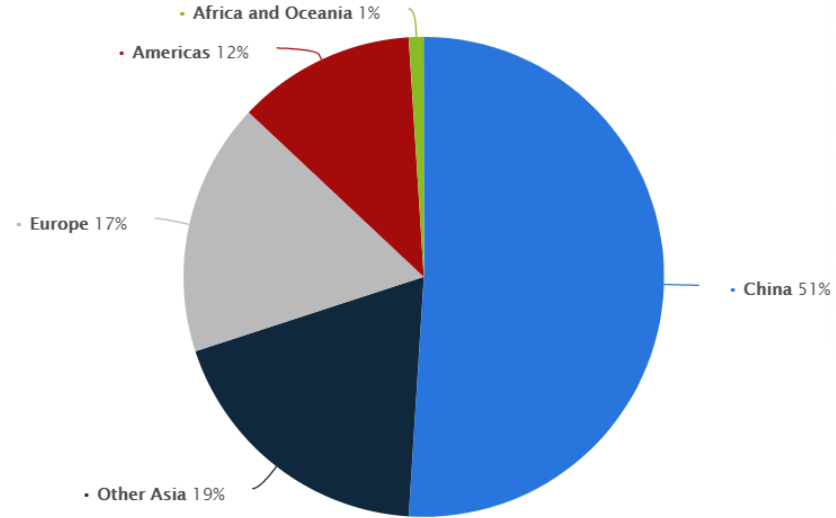
Supply - Copper Production by Country/Area



Top 2 has over 40%

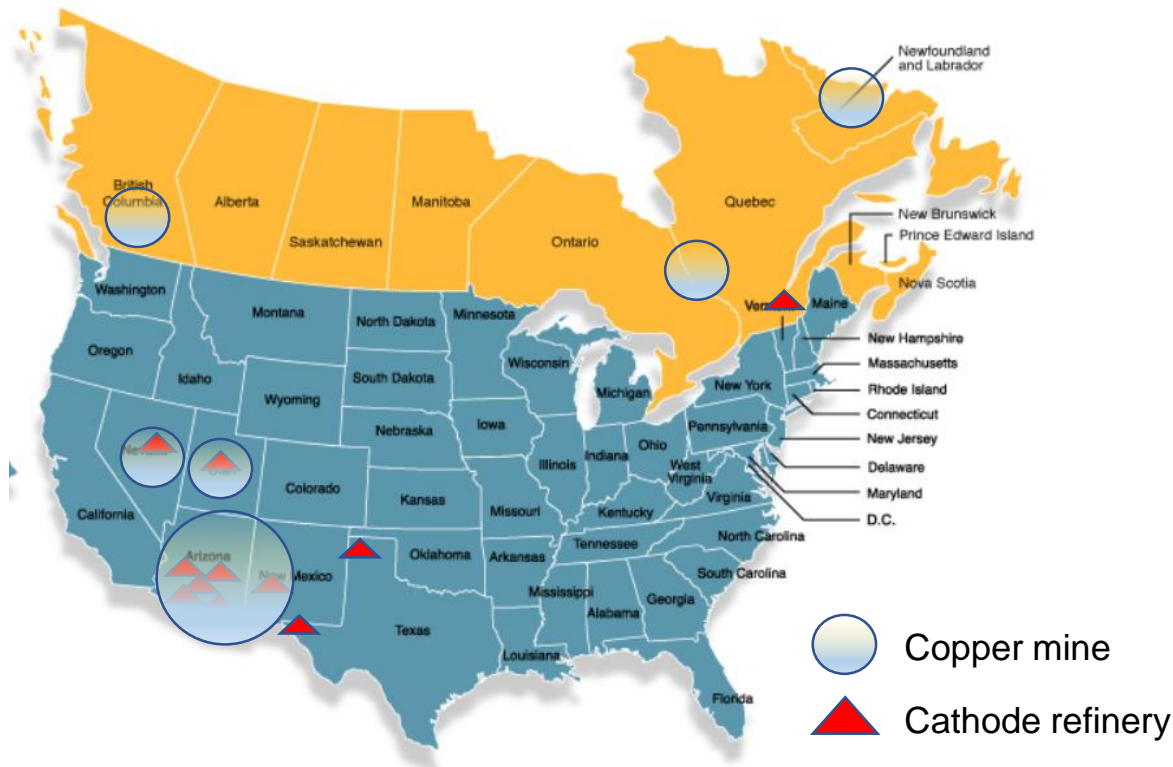


Top 1 has over 51%



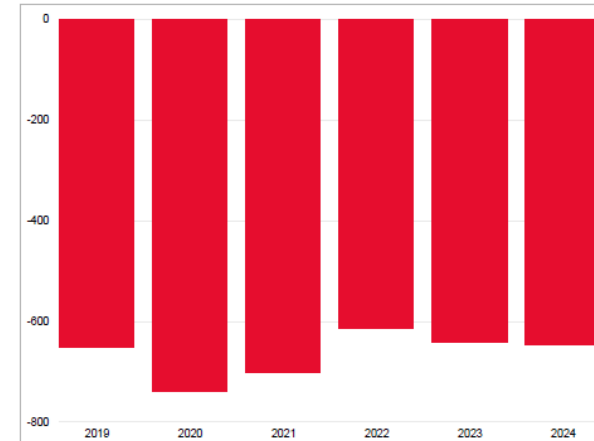
40% of world's copper is not refined in the country, it is mined

Supply - NA Mining and Cathode Production

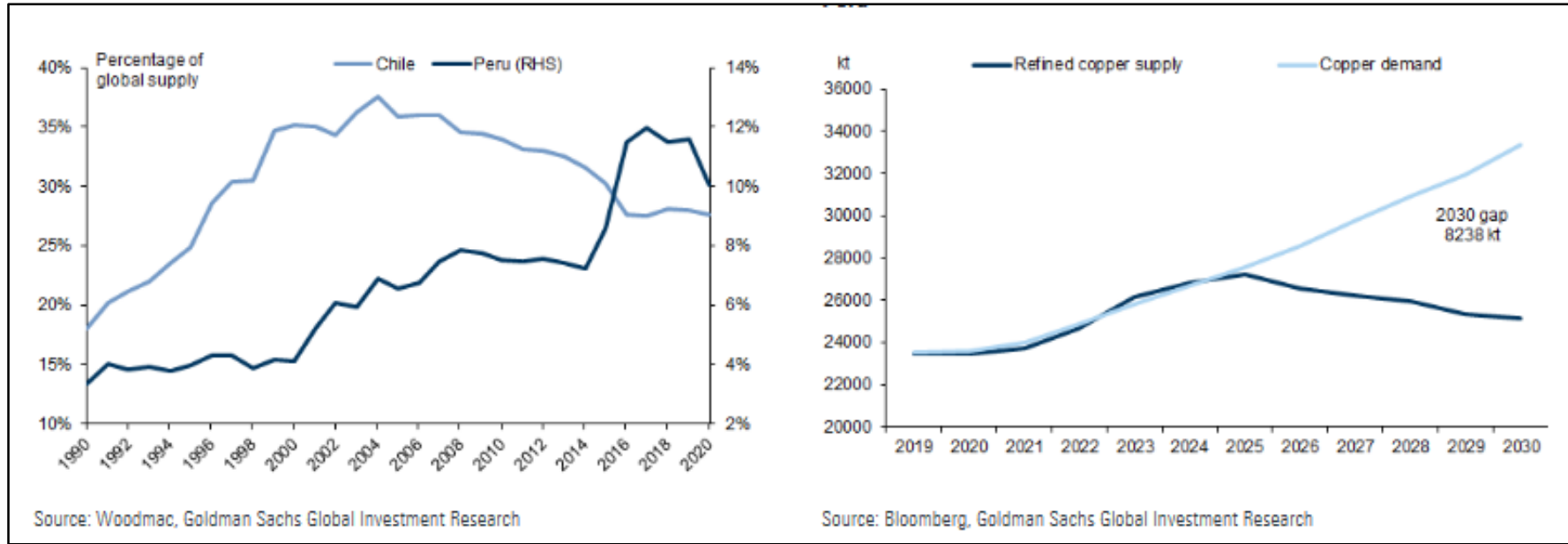


- ❑ All NA cathode refineries are in US South West (SE) except Montreal Glencore CCR
- ❑ US is short of cathode production versus demand (600 ktonnes)
- ❑ Largest new mine – Resolution (AZ) has still not receive a permit (25% of USA needs)

USA refined copper balance (kt)



Copper Demand vs Supply – In tight balance Demand may overtake Supply by 2025



Source: Woodmac, Goldman Sachs Global Investment Research

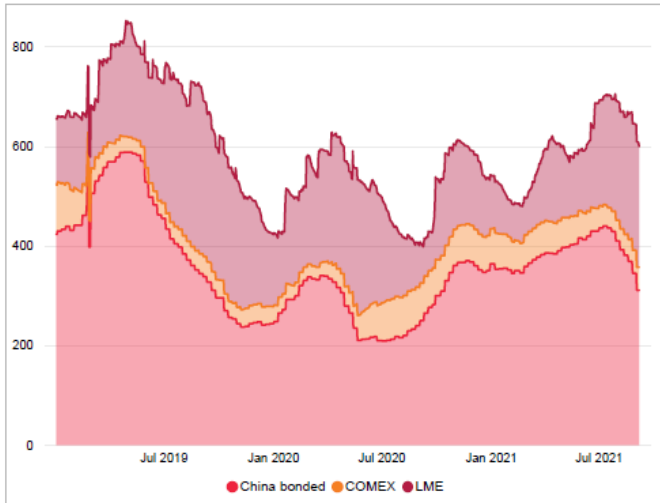
Source: Bloomberg, Goldman Sachs Global Investment Research

Copper Inventories

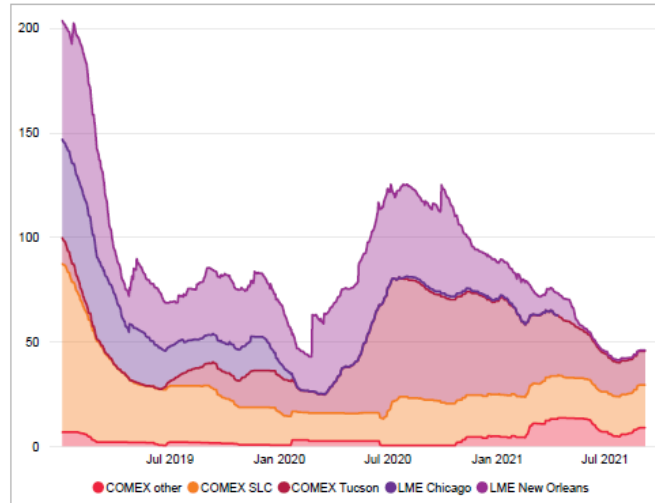
Global slightly down and USA at very low levels



Global visible cathode stocks (kt)



US copper cathode stocks by location (kt)



- ❑ Stocks are at less than 2 week inventories in the USA
- ❑ Cathode is the main raw material to produce rod thus it is expected that rod/wire/cables supply will continue be tight in 2H2021+

Factors Affecting Copper Price (almost all positive)

Comex copper active month (US\$/lb)

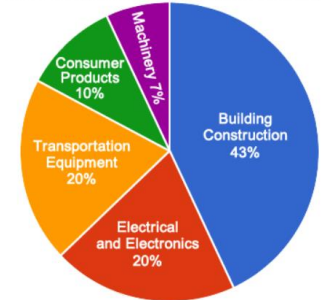


Source: Comex, Bloomberg

Expect more volatility

- China economy (+8%) & World GDP (4% to 6%)
- Central banks providing COVID stimulus
- Green initiatives – copper intensive usage
 - Renewables
 - EV (90 kgs/car)
- US Housing starts (better than pre-COVID)
- Manufacturing PMI index (record in July and still at 60+)
- **Low inventories (less 2 weeks)**
- **Labour conflicts (40% - Chile + Peru) were resolved**
- Geo political instability (Peru's new President)
- **Supply Chain Disruptions (logistics, raw materials etc..)**
- **Strengthening of US currency (inverse relationship copper)**
- Time to start a mine (5-10 years)
- Copper substitution (low to medium) – heat exchangers
- Investment funds (active)

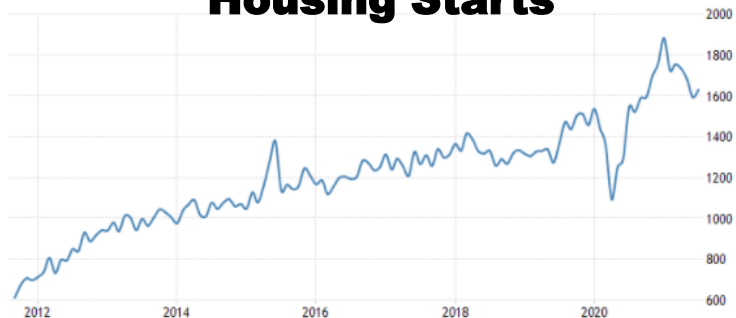
Uses of Copper in the United States During 2019



Copper Price Indicators

US and CAD Housing starts taking a pause – Inflation is not!

Housing Starts



SOURCE: TRADINGECONOMICS.COM | U.S. CENSUS BUREAU

USA



Inflation



SOURCE: TRADINGECONOMICS.COM | U.S. BUREAU OF LABOR STATISTICS



SOURCE: TRADINGECONOMICS.COM | CANADA MORTGAGE AND HOUSING CORPORATION

CANADA



SOURCE: TRADINGECONOMICS.COM | STATISTICS CANADA

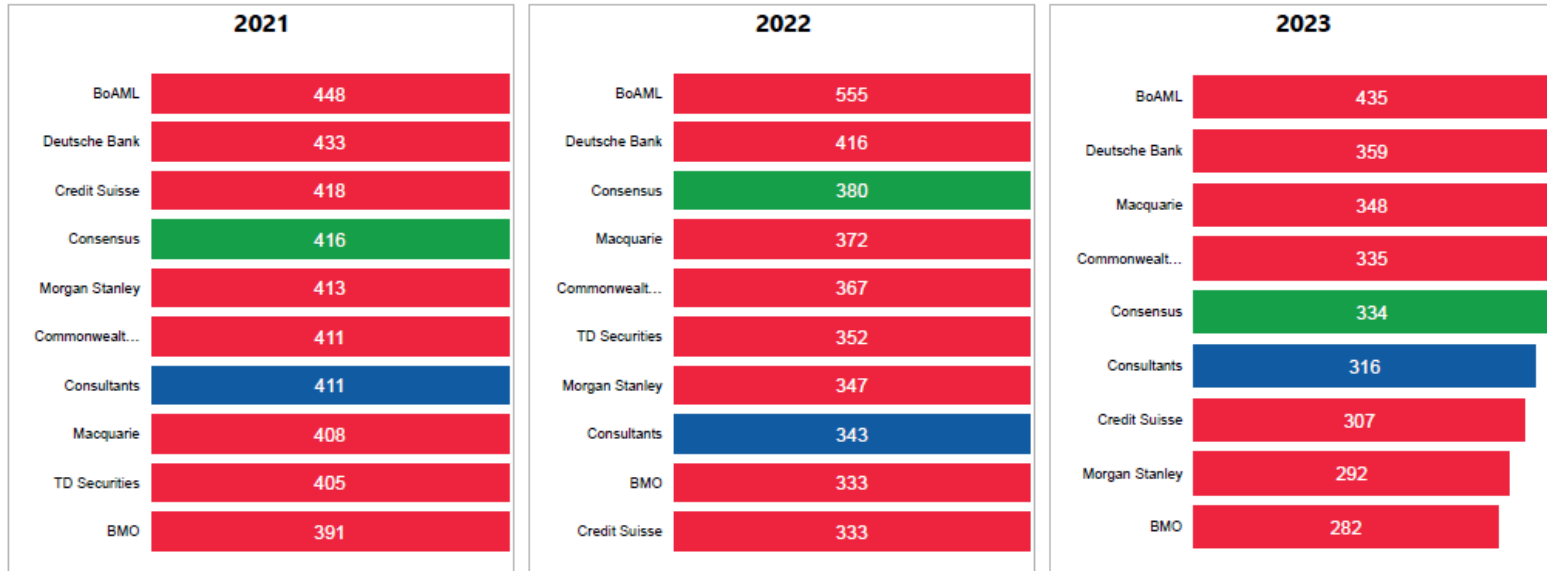
Could Keep Copper Prices Under Pressure

Copper Pricing Forecast – 2021 to 2023

2021 is already above all forecasts at 4.30 US cents/lbs



Copper cash price (real \$2021 c/lb)



Copper Hedging Options by Nexans:

2 options

	Description	Advantages	Example									
Firm Except From Metals (FEFM)	<ul style="list-style-type: none"> Copper rate used in quote is indicative: copper rate in invoice will be different Invoice rate: average rate of the previous business week to the invoice date 	<ul style="list-style-type: none"> Price (excl. metals) valid 3 months and can be updated by the Distributor Pass through metal pricing allows for ideally no metal risk Flexibility in delivery scheduling 	<table border="1"> <thead> <tr> <th>Price Invoice:</th> <th>Sc.1</th> <th>Sc.2</th> </tr> </thead> <tbody> <tr> <td>● FEFM</td> <td>900</td> <td>100</td> </tr> <tr> <td>● Firm</td> <td>500</td> <td>500</td> </tr> </tbody> </table>	Price Invoice:	Sc.1	Sc.2	● FEFM	900	100	● Firm	500	500
Price Invoice:	Sc.1	Sc.2										
● FEFM	900	100										
● Firm	500	500										
Firm (might require a contract)	Copper rate used in quote or confirmation = copper rate at invoice	<ul style="list-style-type: none"> No invoice Price fluctuation – price on the quote is same as on the invoice Fits some projects configurations when contractor wants a firm price 										



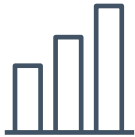
DOW MARKET OVERVIEW

LAUREN BOSS & CHRIS OTUONYE

September 2021

How can we work together to solve today's complex challenges?

At Dow, we're guided by our purpose – to use our materials science expertise in collaboration with our partners to help deliver a sustainable future. Our ambition to be the most innovative, customer-centric, inclusive and sustainable materials science company in the world drives best-in-class performance and a culture where new ideas thrive.



2020 NET SALES

\$39B



EMPLOYEES

~35,700



MANUFACTURING SITES

106 sites



GLOBAL REACH

31 countries

in which Dow manufactures products



PACKAGING AND SPECIALTY PLASTICS

Business Value Proposition



ONE EXPERIENCED TEAM WITH LOCALIZED PRESENCE



TOP INTEGRATED PRODUCER WITH GLOBAL FOOTPRINT



BROADEST PRODUCT PORTFOLIO

Polyethylene and functional polymers



CUSTOMER-TO-CATALYST DEVELOPMENT CAPABILITIES



REGIONAL PACK STUDIOS

Enabling innovation and differentiation



HIGHEST FLEXIBILITY POLYMER TECHNOLOGIES

Bringing Full-System Design and Sustainable Innovations to Key Applications



Flexible Packaging

Polyethylene and adhesives for flexible packaging that minimizes food waste; designed for recyclability



Rigid Packaging

Resins for bottles, drums, caps and lids that are lightweight and durable for a reduced environmental footprint



Consumer

Elastomers, fibers and polyolefin technology for health, hygiene and fitness applications



Infrastructure

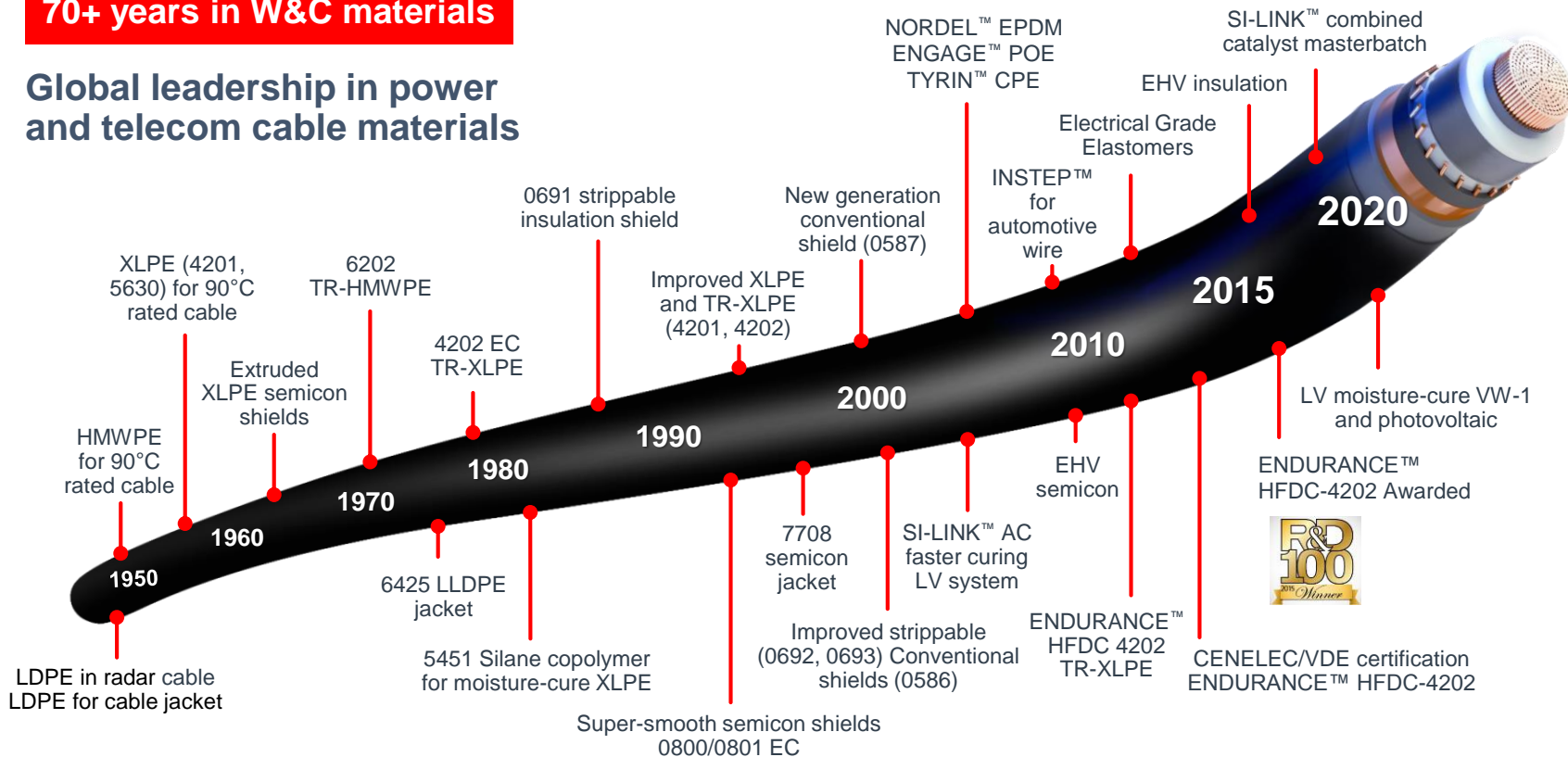
Resin technology for pressure pipe, power/telecom transmission; road paving with recycled materials



Dow's LONG HISTORY OF MATERIAL INNOVATION

70+ years in W&C materials

Global leadership in power and telecom cable materials



POLYETHYLENE INDUSTRY OUTLOOK

Q2 2020 – Q1 2022



CHALLENGES THAT WILL PERSIST THROUGH 2021

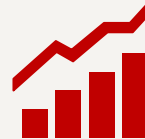
**Logistics
Availability &
Costs**



**Challenged
Supply**



**Raw Material
Availability &
Costs**



**Vaccine
Dependent
Economic
Recovery**





Seek

Together™

Key Takeaways



- Nexans Canada is a **vertically integrated manufacturer with strong material partners**
- **Copper Price:**
 - short term: expect volatility
 - long term: elevated if demand continues to exceed supply
- Manufacturing is experiencing **supply issues** and **manpower shortage**
- Inflation is at **record high** that could lead to bank rate increases in 2022
- Dow is a **global supplier of raw materials for Wire & Cable markets** and is prepared to support our customers in these applications
- Dow recommends **working closely with your supply chains** to best forecast raw material needs to mitigate disruptions in an already constricted supply chain

Questions




Chat

[type question here]

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Thank you for your attention!

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ELECTRIFY THE FUTURE