



WEBINAR: Sustainability in the Wire & Cable Industry Nexans Low Carbon Offer

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HOUSEKEEPING RULES & PRESENTER



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- 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



Agenda



- 1 | Nexans Introduction
- 2 | Nexans Corporate Commitment on Sustainability
- 3 | How to assess the environmental impact of cables
- 4 | How much CO2 is emitted for the manufacturing of cables?
- 5 | What are the levers to help reduce it?
- 6 | Nexans Low-Carbon Offer
- 7 | Q&A



1. NEXANS INTRODUCTION

Nexans has a long legacy in Canada



Purpose: Electrify the Future

1911 Proud to be a Canadian Cable Manufacturer for over 110 years

Vertically Integrated

750+

Products in residential, commercial, industrial, utility, renewable energy and copper rod/wire

500+



2. NEXANS CORPORATE COMMITMENT ON SUSTAINABILITY

Sustainability at the core of Nexans Strategy and Offering to the Market



Aligned with the Science Based Target Initiative (SBTi)





3. HOW TO ASSESS THE ENVIRONMENTAL IMPACT OF CABLES?

Quantitatively measuring the environmental footprint of a product requires a holistic, scientific, transparent and comparable methodology -> Environmental Product Declaration ("EPD") following ISO 14025



Multi-criteria

<u>Global warming potential</u> (kg CO_2 eq.): (or CO_2 emission) the indicator of potential global warming caused by emissions to air contributing to the greenhouse effect.

Resource depletion (kg Sb eq.): the indicator of the depletion of natural non-fossil resources.

Energy Usage (MJ): the indicator of total use of primary energy resources.

Fresh Water Usage (m³): the indicator of total use of fresh water.

... among 20+ criteria



3. HOW TO ASSESS THE ENVIRONMENTAL IMPACT OF CABLES?



Environmental Product Declarations (EPDs) are now available for > 90% of Nexans products in Canada.

We can now measure the environmental impact of our products and, for instance, assess the CO_2 eq emitted for a given project. CARBON QUOTATIONS.

You can find Nexans EPDs directly on our website and you can even read the CO₂ generated by the manufacturing of our product directly on our package labels.



4. HOW MUCH CO₂ IS EMITTED FOR THE MANUFACTURING OF CABLES?



4. HOW MUCH CO₂ IS EMITTED FOR THE MANUFACTURING OF CABLES? CU NMD90 circuit size $\begin{pmatrix} +200 \text{ kg} \\ \text{CO}_2 \text{ eq} / \text{ km} \end{pmatrix}$ CU TECK90 power size $\begin{pmatrix} +25 000 \text{ kg} \\ \text{CO}_2 \text{ eq} / \text{ km} \end{pmatrix}$ AL USEI90 power size $\begin{pmatrix} +6 000 \text{ kg} \\ \text{CO}_2 \text{ eq} / \text{ km} \end{pmatrix}$



Average 18,000 kg CO₂ eq emitted per capita yearly in Canada* (2020)

The Production phase of cables generates a significant amount of CO_2 ("cradle to gate") = for instance roughly 600 m of TECK90 (large power size) or 3 km of USE190 (medium power size) generates equivalent to 1 yearly emission per capita in Canada (2020).

Main contributors of CO_2 emission for the production phase is the metal in conductors =

- Up to 50% of total for Copper cables
- Up to 80% of total for Aluminum cables

*Source: https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/global-greenhouse-gas-emissions.html



5. LEVERS TO HELP REDUCE CO_2 EMISSIONS

Tackling the biggest contributors to Global Warming Potential (CO₂ emissions)

At "Manufacturing" phase (~20% total CO₂)

- 1. Use recycled or "low carbon" metals (that contributes between 44% to 81% of total CO₂)
- 2. Incorporate recycled compounds (if allowed by national standards, which is not yet the case in Canada)
- 3. Reduce energy consumption in production & use electricity from renewable or decarbonized sources

- During "Use" phase (~80% of total CO₂)
- 1. Reduce energy losses (Joule effect) : calculate optimum economical and environmental cross section (IEC 62125)
- 2. Increase life span : increasing life span can greatly reduce the life cycle impact of the cable since the product would not have to be replaced as often

4. Optimize transports 30 years Versons 10

6. NEXANS LOW-CARBON OFFER

All copper cables produced by Nexans integrate minimum 14% recycled copper

Scrap collected from partners



Supplied Cathodes integrating recycled content





Montreal Rod Mill Operations

= 8 mm rod with minimum 14% recycled content



CU NMD90 circuit size (non-recycled vs recycled)



Incorporating 14% recycled copper in conductors allows to reduce CO2 footprint of the cable by 9% for NMD90 circuit size (>20kg CO2 saved per km !)

This unique offer on the market is possible relying on Nexans vertically integrated model with Montreal rod mill

6. NEXANS LOW-CARBON OFFER





Q&A





Contact us

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