



Covestro:
Your Go-to Partner in
Achieving Sustainability
Goals and High Performance



I. Meeting Telecommunications Industry Megatrends

In recent years, environmental problems have become increasingly serious due to the excessive pursuit of rapid economic and industrial development. Hence, climate action will be more and more important as a strong force for global change, which is also the long-term goal of the telecommunications industry.

The mobile industry, as a subset of the telecommunications industry, has a unique role to play in tackling the issues caused by climate change, and so far, has demonstrated exceptional leadership:



1st industry to commit fully to the 17 United Nations Sustainable Development Goals.



Over **a third** of all the world's mobile operators by revenue committed to Net Zero.

Examples for "Net Zero" sustainability goals on the value chain:

- Deutsche Telekom:** Net Zero from production to customer by 2040.
- Verizon:** Net Zero in scope 1 & 2 and 40% reduction in scope 3 by 2035.
- Ericsson:** Net Zero emissions across the value chain by 2040.

II. Challenges to achieve "Industry Net Zero"

The GHG (greenhouse gas) Protocol is one of the most used standards and defines three "scopes" for GHG corporate accounting and reporting purposes.

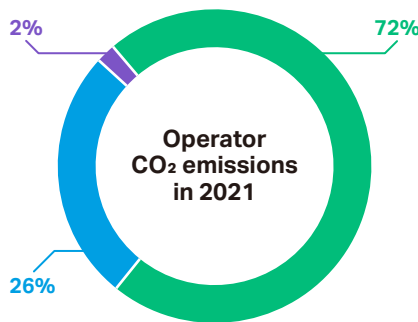
Scope 1

Direct emissions from mobile operators, e.g. emissions from vehicle fleets that maintain networks, or from diesel, used to operate base stations in remote areas.

Scope 1

Scope 2

Scope 3



Source CDP, GSMA Intelligent

Scope 2

Indirect emissions, such as electricity or energy purchased to heat and cool the mobile operators' buildings.

Scope 3

Indirect greenhouse gas emissions from upstream and downstream processes in the value chain.

Most of GHG emissions in the mobile sector lie upstream in the industry's **supply chain (Scope 3)**;

Therefore, **achieving Net Zero and mitigating climate issues, will require strong co-operation & commitments from stakeholders along the entire value chain.**

Meanwhile, **it remains to be solved for the industry to fulfill the challenging environmental objectives without compromising on performance.**

III. Our Ambitious Climate Target and Diversified Sustainable Solutions

Contribute to telecom operators and network equipment suppliers' target for Scope 3




Bold target from Covestro to achieve climate neutrality:



*: Million metric tons of greenhouse gas emissions comprise Scope 1 and Scope 2. Greenhouse gas emissions from Scope 3 are further reduced.
 **: Climate neutrality in Scope 1 and Scope 2; Scope 3 emissions reduction target will be announced in 2023.

Support industry's climate objectives with more sustainable and high performance solutions

Covestro Solutions

Mechanical Recycling	Renewable Attributed	Circular Design Guidance
 <p>PCR* and PIR* Polycarbonates: derived from mechanical recycling, traceable sources and reliable recycling technologies.</p> <p>(*PCR: Post-Consumer Recycled; PIR: Post-Industrial Recycled)</p>	 <p>RE Series*: renewable attributed polycarbonates partly from biological waste and residues to replace fossil feedstocks.</p> <p>(*Mass balanced bio-circular products with ISCC PLUS certified)</p>	 <p>The 1st guidebook for the Electronics & Electrical industry, providing options for more sustainable material selection and driving co-creation in product design.</p>
<p>Value</p> <ul style="list-style-type: none"> • Carbon footprint reduction (up to 50%) • Give plastic waste a new life while addressing the issue of waste • Good properties comparable to virgin materials 	<ul style="list-style-type: none"> • Significant carbon footprint reduction (soon up to 100%) • Preserve fossil fuels as valuable resources • High quality drop-in solution, identical properties as primary fossil materials • Hybrid solution available (PCR+RE) address both climate and waste issue 	<ul style="list-style-type: none"> • Circular design strategies to support reparability and recyclability of devices • Material selection as the first step to circular design • Promote an extended lifecycle perspective to reduce the environmental impact of products

IV. Case Study: Covestro Makrolon® RE solution supports Deutsche Telekom's #GreenMagenta products

Deutsche Telekom developed its climate and environmental protection program called #GreenMagenta, a group-wide initiative to encourage more resource-efficient and climate-friendly changes in the core business. Through the Program and #GreenMagenta labels, Deutsche Telekom is demonstrating its firm commitment to achieve their climate targets.

Based on common sustainability goals, Deutsche Telekom teamed up with Covestro, to develop the next generation fixed line device which utilizes Makrolon® RE materials. This fixed line

device has been awarded with the #GreenMagenta label, to highlight the value of its contribution to sustainability.

As a renewable attributed bio-circular material, Makrolon® RE provides a high-quality drop-in solution, to reduce the use of fossil resources and achieve a lower carbon footprint, without compromising on mechanical & functional performance.

"We aim to shift all our production processes and products completely to circular principles in the long-term, and we intend to support meeting our and customers' climate objectives at the same time."

Lynette Chung
Chief Sustainability Officer at Covestro

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