



Hello **TOMORROW.**

Materials for a connected future

CES® 2021 • January 11-14, 2021

Keep up with Covestro at CES by following

#HelloTomorrow on social media:

[solutions.covestro.com](https://www.solutions.covestro.com) •  • 

PUSHING THE BOUNDARIES OF WHAT IS POSSIBLE

Tomorrow's connected world relies on innovative materials. Covestro is ready. We are constantly developing high-performance polymers to bring fresh ideas to life.

Curious and collaborative, we seek partners to push boundaries with us. Our premium polymers are advancing breakthroughs in industries like mobility, construction, healthcare and electronics. Combining our materials with your ambitious plans, we will work together to address your challenges – and the world's most pressing problems.

From climate change to resource scarcity to population growth, our future requires a high commitment to sustainability. We embrace a Circular Economy as our guiding principle and our highest goal. Every solution we create must make our lives and our planet more sustainable.

WHERE BETTER TO CONNECT THAN AT CES 2021?

We are open for innovation and committed to make the world a brighter place. Let's create tomorrow together.

Connect with us during CES
#HelloTomorrow



OUR MATERIALS

3D print	Elastomers
Adhesives	Films
Coatings	Plastics
Composites	

OUR INDUSTRIES

 Construction	 Healthcare
 Electronics	 Mobility
 Energy	 Security & protection

WE CREATE THE MATERIALS

THE FUTURE IS MADE OF

Covestro is in the business of making life better. We constantly look for ways to collaboratively improve products and technologies – making them more efficient, safer, smarter and more sustainable. Explore some of our latest material innovations in six areas.

HOME AUTOMATION & SECURITY

Anticipating the smart home of the future, with materials that integrate electronics to improve our lives

- **Embedded electronics**
Makrofol® polycarbonate film and Makrolon® polycarbonate are integrated with electronic circuits for smart, ultra-slim functional design.
- **Home automation**
For the household of tomorrow, we are innovating how Covestro polycarbonates can power smart home products, such as IoT devices, that are mobile, integrated and customized.
- **Smart locks**
Touch-controlled home security is enabled by light, thin 3D parts made from Makrolon® polycarbonate powered by injection molded structural electronics.
- **ID/Banknote holograms**
A leading developer replaced foil-based rainbow security holograms with vibrant, durable 3D holograms on Bayfol® HX photopolymer film.

NETWORK & TELECOM

Building resilient, sustainable cities of the future with materials that support next-gen technology

- **5G transmitters**
Makrolon® polycarbonate optimizes signal transmission and heat resistance while making it easier to deploy in urban outdoor environments.
- **Windmill farm in Germany**
Starting in 2025, Covestro is set to power its plants in Germany with wind energy from the North Sea as part of our move to a circular economy.
- **5G mobile phone covers**
Makrofol® SR multilayer films support 5G high-frequency radio transmission requirements while offering durability and design aesthetics.
- **Telescope applications**
When the Italian National Institute for Astrophysics needed highly efficient, diffractive light-guiding films for its specialized telescopes, it chose Bayfol® HX holographic films for optical quality and light diffusion.

MOBILITY

Driving innovation into motion to transform vehicle design inside and out

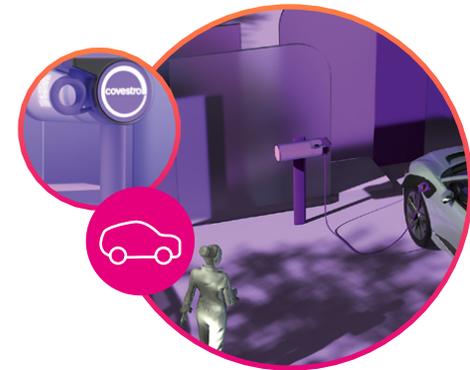
- **Electronics-enabled mobile healthcare**
Covestro collaborated with designers to gain insights and envision electronics-enabled mobile healthcare for both on- and off-grid care scenarios.
- **Functional exterior panels**
Covestro polycarbonates' transparency and impact resistance allow for new design elements using light and graphics for a new generation of front-ends and other exterior panels.
- **Mono-material headlamps**
A novel headlamp concept based solely on polycarbonate materials simplifies construction, reducing cost, weight and space while increasing sustainability.
- **Seamless multifunctional displays**
Covestro polycarbonates and films enable electronics-enabled interfaces, integrating touchscreens, controls and ambient lighting in complex 3D forms.
- **Holographic films**
With breakthrough optical films technology, Bayfol® HX photopolymer film enables new designs for head-up displays and automotive lighting.



LIGHTING & LED

Illuminating sustainable performance and seamless design for homes to public spaces

- **Smart outdoor lighting**
Engineered to survive heat, cold and impact, Makrolon® TC polycarbonate is a single material that reduces design complexity, integrating sensors, displays, antennas, cameras and more into public space and home security lighting.
- **Light management films**
Makrofol® films make it possible to diffuse, reflect or guide light. Our black panel films help combine analog and digital elements into a seamless display, such as a speedometer cluster.
- **Ambient vehicle interior lighting**
As display surfaces and touchscreens in vehicles increase due to digitalization, connectivity and autonomous driving, our polycarbonate films help improve designed ambiance.



ELECTRIC VEHICLE CHARGING

Leading the charge in smart packaging and energy density for the growing EV infrastructure

- **EV battery packaging**
In the shift to electrification, Covestro polycarbonates help maximize energy density while keeping battery cells safe and cool. They also offer dimensional stability, fire resistance and reduced density.
- **EV charging stations**
Our polycarbonate resins and blends are used in both exterior and interior charging station components, including housings, display lenses, light guides, pedestals and plug housings.



WEARABLES & AR/VR

Empowering wearables for your daily needs with strength, durability and comfort

- **Smart glasses/optics**
Lightweight and customizable, Bayfol® HX holographic film meets the optic quality demands of AR glasses.
- **Augmented reality holographic display**
Sony chose Bayfol® HX photopolymer film to create 360-degree floating holographic AR images.
- **Wearables for medical applications**
The Apollo wearable improves the body's resilience to stress. Makroblend® M525 PC+polyester blend keeps the device clean and comfortable for everyday use.



Covestro LLC
1 Covestro Circle
Pittsburgh, PA 15205
USA
412-413-2000

solutions.covestro.com
plastics@covestro.com

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance, information and recommendations to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by Covestro. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

Makrolon®, Bayfol®, Makrofol® and Makroblend® are registered trademarks of the Covestro Group.
©2020 Covestro LLC. All rights reserved.